












College of Lake County
CATALOG

2001-2002

On the Cover

As a community college, the College of Lake County offers a wide array of academic programs to serve students with many different needs.

This catalog is in effect for the academic year 2001-2002. The information is subject to change within that period. Any changes will be noted in the class schedule published each semester.

Message from the President

The photos on the cover of this year's *College of Lake County Catalog* were chosen to suggest the wide range of programs offered by the college. As a community college, the College of Lake County serves students with many different needs, from many different backgrounds and walks of life. As a comprehensive summary of our program offerings, the *College of Lake County Catalog* reflects the diversity of our students' needs.

Comprehensive and *diverse* are good adjectives to describe the programs offered by the college. Reading through the pages of this catalog, you will find more than 100 degree and certificate options, preparing students for transfer to four-year institutions or immediate entry into rewarding careers.

Keeping our programs comprehensive and diverse requires constant work. Last fall, we introduced 15 new academic programs, and we are currently seeking approval to add eight additional programs. Our goal is to offer students the best possible education, one that develops critical thinking skills and prepares students for the next step in their lives, whether that step is further education or employment.

To evaluate our academic offerings, we conduct periodic program reviews, and we seek real-world feedback from students, employers and community leaders. We strive to meet local educational needs, mindful that in today's global economy, meeting local needs means providing a world-class education.

Providing access to a top-quality, world-class education is our entire purpose, and it is a purpose we share with our sister colleges throughout the nation. For this reason we are pleased to join with the nation's other community colleges this year in observing the centennial anniversary of the founding of the nation's first public community college.

We are proud of this long tradition of community service, and we pledge to continue this tradition in Lake County.

Gretchen J. Naff, Ed.D.
President

Table of Contents

The College of Lake County is an Equal Opportunity/Affirmative Action Institution in all aspects of education and employment. Information in this catalog is accurate as of May, 2001, but is subject to change.

2001 Fall Semester

August	13-18	Academic Advising, Registration and Faculty and Staff Development Week
August	20	Classes Begin
September	3-4	Labor Day Recess (no classes)
October	16	Mid-Semester
November	21-25	Thanksgiving Recess (no classes)
December	10-16	Final Exams
December	16	Semester Ends

2002 Spring Semester

January	14-19	Academic Advising, Registration and Faculty and Staff Development Week
January	22	Classes Begin
March	18	Mid Semester
March	25-31	Spring Vacation (no classes)
May	11-17	Final Exams
May	17	Semester Ends
May	18	Commencement

2002 Summer Session

June	10	Classes Begin
July	4	Independence Day Holiday (no classes)
July	9	Mid-Session
August	4	End of Session

2002 Fall Semester

August	19-24	Academic Advising, Registration and Faculty and Staff Development Week
August	26	Classes Begin
September	2-3	Labor Day Recess (no classes)
October	22	Mid-Semester
November	27 to December 1	Thanksgiving Recess (no classes)
December	14 (5 pm)-20	Final Exams
December	20	Semester Ends

2003 Spring Semester

January	13-18	Academic Advising, Registration and Faculty and Staff Development Week
January	21	Classes Begin
March	17	Mid Semester
March	24-30	Spring Vacation (no classes)
May	10-16	Final Exams
May	17	Semester Ends
May	17	Commencement

2003 Summer Session

June	9	Classes Begin
July	4	Independence Day Holiday (no classes)
July	6	Mid-Session
August	3	End of Session

CLC Mission

& Goals

Established by the citizens of Lake County within a framework of the Illinois Master Plan for Higher Education, the College of Lake County is a comprehensive community college dedicated primarily to meeting the post-secondary educational needs of individuals within District 532. The College of Lake County is accredited by the Higher Learning Commission and a member of the North Central Association, 30 N. LaSalle Street, Suite 2400, Chicago, IL 60602, (312)-263-0456 or (800) 621-7440.

The College of Lake County strives for excellence by responding to a wide range of transfer, career, continuing, and developmental educational needs through diverse and relevant curricular offerings. More specifically, the college pledges to provide high quality general education in the liberal arts and sciences, career education commensurate with student occupational needs and opportunities, continuing education, and basic skills that are essential for success. The college also strives to ensure that its students develop an appreciation for the diversity of world cultures and the importance of international and multicultural perspectives. As an institution that values the learning of its faculty and staff as well as its students, the college will engage in ongoing processes of assessing student achievement and providing staff development in order to improve its work and be accountable to its several constituencies.

The college pledges to support these courses and programs with an array of print, multimedia, and electronic learning resources, and flexible student services that include advising, counseling, financial aid, and placement. Throughout all of its work, the college will maintain academic standards that will lead to competence and encourage the pursuit of excellence.

Furthermore, the college affirms its commitment to fostering the cultural, aesthetic, and intellectual life of the district and assumes responsibility for providing leadership to the community in these areas. In addition, the college is committed to the advancement and development of the district's economy and recognizes its civic responsibility to provide education and training for business and industry. In these and other areas of its mission, the college will enter into partnerships that will help achieve greater efficiency and effectiveness.

The college assures equal access and opportunity for all individuals regardless of race, ethnic origin, creed, gender, age, veteran's status, sexual orientation, or non-disqualifying disability.

Consistent with its mission, the College of Lake County sets forth the following goals and objectives for Fiscal Years 2002-2004:

Strategic Goal 1: Learning

The College of Lake County will enhance student and organizational learning and development.

This goal includes the following themes: enhancing teaching and learning, using technology to enhance learning, focusing on student-centered services, recognizing and valuing a diverse community, and building a competitive workforce.

Objective 1: The college will increase use of diverse instructional techniques such as collaborative learning, service learning, work-based learning, and problem-based learning.

Objective 2: The college will support a variety of educational opportunities through technology.

Objective 3: The college will improve systems, services, and spaces that promote student life and success.

Objective 4: The college will work to create an environment of support and nurturing for students. The college seeks to help students feel welcome and build confidence in their ability to succeed in their goals.

Objective 5: The college will facilitate educational transitions, ensuring that students are prepared to progress from one level to the next.

Objective 6: The college will support a positive environment for diverse student and employee populations.

Objective 7: The college will strengthen workplace skills such as personal responsibility, work ethic, and respect for other people.

Objective 8: The college will develop and modify programs and services to meet changing educational and workplace needs in Lake County.

Objective 9: The college will become the premier location for workforce training.

Objective10: The college will encourage and strengthen internal relationships that emphasize team building, partnerships, communication, and participation in decision making.

Strategic Goal 2: Community Outreach

The College of Lake County will strengthen its outreach to the community.

This goal includes the following themes: increasing outreach to identify and serve community needs and increasing partnerships with diverse constituent groups within the community.

Objective 1: The college will increase public awareness of its roles and impact in various communities.

Objective 2: The college will partner with external entities to address educational issues affecting the quality of life in Lake County.

Objective 3: The college will identify and respond to the educational needs of special populations.

Objective 4: The college will serve as a cultural resource center by offering diverse activities that represent a variety of disciplines and cultures.

Strategic Goal 3: Educational Access

The College of Lake County will continue to work to reduce barriers and increase opportunities to meet the diverse needs of the people of Lake County.

This goal includes the following themes: focusing on student-centered services, enhancing the technology infrastructure, improving transportation to campuses, and expanding facilities.

Objective 1: The college will review and augment programs and services to ensure access.

Objective 2: The college will analyze and streamline student services procedures.

Objective 3: The college will work to expand financial aid for students and improve delivery systems.

Objective 4: The college will utilize appropriate technology to make communication and instruction more accessible and flexible.

Objective 5: The college will work internally and with community organizations to improve transportation to campuses.

Objective 6: The college will modify and expand college facilities to meet the needs of the community.

Objective 7: The college will work closely with the University Center of Lake County to ensure effective student transitions.

Objective 8: The college will increase and strengthen partnerships and cooperative agreements with four year colleges and universities as well as with local elementary and secondary schools.

Strategic Goal 4: Accountability

The College of Lake County will continue to evaluate and improve all academic and nonacademic departments to ensure high quality. The college will, also, work to ensure resources are used efficiently and effectively.

This goal includes the following themes: assessing and improving all departments and programs, and ensuring adequate financial resources.

Objective 1: The college will integrate assessment of the curriculum and student achievement into appropriate college systems and institute strategies for continuous improvement.

Objective 2: The college will work to improve information technology systems to better serve students, track outcomes, and assess programs and activities.

Objective 3: The college will conduct reviews of all departments to ensure the highest quality education, efficient and effective operations, and superior services to students, staff and the community.

Objective 4: The college will maximize the use of existing revenue sources and develop new revenue sources to ensure long-term viability.

Objective 5: The college will work closely with the University Center of Lake County to support the efficient use of resources.

Programs of Study

& Educational Options

The College of Lake County offers students a variety of educational options. Many come to CLC looking for education that will lead immediately to a satisfying career. Other students come to gain college credit so that they may transfer to a four-year college or university. Still others come to develop a specific job skill, to improve their ability to speak and write the English language, or to continue the process of life-long learning. Some students come to the College undecided about their futures. To meet the needs of all of these students, CLC offers a variety of programs of study.

Transfer Education

Students who come to the College of Lake County in order to earn credits that are transferable to a four-year college or university will find a wide range of programs designed to prepare them for work at the junior level. These programs lead either to an Associate in Arts (A.A.), an Associate in Science (A.S.), an Associate in Fine Arts (A.F.A.), or an Associate in Engineering Science (A.E.S.) degree at CLC. Classes in these programs are comparable to those offered in the first two years at a four-year institution.

Students are urged to select the college to which they would like to transfer and to design their program to meet the requirements of that institution. For information on specific courses whose credits are transferable to a given college or university, students should consult the Counseling Center.

Requirements for the Associate in Arts, the Associate in Science, the Associate in Engineering Science, and the Associate in Fine Arts degrees are listed on pages 46-62.

Career Education

Many students at the College of Lake County are working to gain enough skills and knowledge in a field to be able to find a job in that career area when they leave CLC. Some of these students take only a few career courses to reinforce and improve skills they already possess. Other career students enroll in a two-year program which leads to an Associate in Applied Science degree (A.A.S.) or a shorter sequence which leads to a Certificate.

Many career students at CLC are recent high school graduates. Some have recently completed a high school equivalency program (GED). Many others are re-educating themselves to keep up with changes in the workplace. Trained and skilled individuals are needed to meet increasingly exacting qualifications in many fields. It is estimated that during the next 10 years, 60 percent of all job opportunities will require a level of education beyond high school but less than a four-year degree. Career programs prepare students to step directly into this fast-moving age of technological change. The College currently offers over forty specialized career programs, many of which are available both day and evening.

In addition to the career programs offered within the College of Lake County's district, there are several joint educational agreements in effect that allow students to attend programs not offered at CLC at other institutions at greatly reduced costs. Such agreements exist with the following institutions:

Elgin Community College • Elgin, IL
Gateway Technical College • Kenosha/Racine/Elkhorn, WI
William Rainey Harper College • Palatine, IL
McHenry County College • Crystal Lake, IL
Oakton Community College • Des Plaines, IL

Students attending an approved program at Gateway Technical College must pay the Gateway in-district tuition per credit hour (not including lab and materials fees).

The four Illinois institutions listed above treat CLC students as their own district residents by giving them equal consideration in admission to limited enrollment programs (within limits set forth by joint agreement) and charging them in-district tuition rates.

All programs have been planned with the assistance of citizen's advisory committees to meet local and regional employment needs. They have also been planned in conformity with the Illinois Community College Board, the Illinois Board of Higher Education, and the Illinois State Board of Education, Division of Adult, Vocational, and Technical Education.

The programs offered through joint agreements and their respective institutions are indicated on pages 44-46. For information about transfer and career programs, as well as program listings, additional tuition information, and authorization to attend these institutions, one should contact the Office of the Assistant Vice President of Educational Affairs at (847) 543-2422.

Continuing Education

The Department of Continuing Education at the College of Lake County offers a wide variety of educational opportunities to satisfy both personal interests and professional needs. To promote the ability of students to learn throughout their lives, the College provides continuing education courses which range from one-day seminars and workshops to semester-length courses.

Non-credit courses, workshops, seminars, and conferences are offered to encourage and heighten life-long learning without the constraints of credited offerings.

Credited continuing education courses provide vocational skills training to individuals who have learning goals which fall outside those of Career Education Certificates or Associate Degree Programs. Continuing Education courses do not apply toward a Career Education Certificate or Associate Degree Program.

Continuing Education also offers the following special programs:

Allied Health
Courses, seminars, and conferences are designed to meet certification and career requirements for allied health care professionals while also providing continuing education contact hour approvals. These offerings are scheduled at a variety of times and locations to maximize convenience.

Explore!
Sixth through eighth grade students have an opportunity to sample the college environment in this series of Saturday mini-classes for young people.

Discovery!
The Discovery! program for adult learners provides exciting and creative courses for people fifty and older.

For more information on these programs, please call the Office of Continuing Education at (847) 543-2022.

Adult Education

Adult education provides several specific types of educational opportunities.

1. Adult Basic Education (ABE) provides individualized instruction in reading, general language development, mathematics, and life-coping skills. Students proceed at their own paces.

2. English as a Second Language (ESL) classes are for students whose primary language is not English. Speaking, reading, and writing skills are taught. Students may enroll at the beginning, intermediate, or advanced level, or in a class emphasizing work on a particular skill.

3. General Educational Development (GED) classes prepare Lake County adults who have not completed high school to take the GED exam. Students who successfully pass the GED exam are awarded a high school equivalency certificate. This class is offered in English and Spanish.

4. High School Completion classes are for adults 19 years or older who have separated from a secondary educational system and want to complete their high school graduation requirements to earn a regular degree.

5. Vocational Skills Training (VST) is designed to introduce various types of opportunities available in industry. Information on various vocations is presented so that students may make an informed choice about the type of work they would like to pursue.

Skills Enhancement Program

The College of Lake County is committed to helping students develop the skills that are needed for college-level courses and programs. Because of this commitment, the College requires that all new students meet the language and mathematics requirements specified as prerequisites for college-level courses.

Students who need to review or develop their language or mathematics skills are required to enroll in one or more of the skills enhancement courses until they develop college-level skills in reading, writing, and/or mathematics. Students who need work in all three areas will be limited to courses that do not require college-level reading, writing, and mathematics.

Students who speak English as a second language are required to enroll in academic ESL classes such as English 090, 091, 092, 093, 094, 095, and 096. Placement in a specific course depends on ESL placement test scores and recommendations of faculty.

Testing
One way in which a student may show that he or she has attained the required skills is by taking the Academic Proficiency Test administered by the Learning Assistance Center. The Academic Proficiency Test includes a language skills test and a mathematics test. This test battery is administered at the following CLC campus centers. Please call for further information.

1) Grayslake Campus, Grayslake (847) 543-2076

2) Lakeshore Campus, Waukegan (847) 623-8686

3) Southlake Educational Center, Vernon Hills (847) 478-1833

Courses
Instruction in basic skills is provided by specific courses in the various divisions, by modules in the Learning Assistance Center, and by individual tutoring. Students who have questions about basic skills courses in reading, writing, or mathematics should contact a counselor, advisor, LAC staff member, or the appropriate division office:

Engineering, Math, Physical Sciences:
Room B162, (847) 543-2044.
Communication Arts, Humanities, and Fine Arts:
Room B237, (847) 543-2040.
Counseling Center: Room C 110, (847) 543-2060.

Individual **tutoring** by trained professionals as well as by fellow students is available in the Learning Assistance Center.

The Writing Center offers individual support for all levels of writing ability. Peer and specialist tutors help students become more confident and more proficient writers by identifying their strengths and weaknesses.

The Math Center provides tutoring in all levels of mathematics. Tutors also assist students with math-related questions from other courses. Additional help is available through study groups, math anxiety workshops, and supplemental video tapes, audio tapes, workbooks, and software.

Business and Industry Training Center

The Business and Industry Training Center provides Lake County employers with a wide range of instructional programs for training or retraining their employees. Training features include customized curricula, on-site and off-site programs, and program development to meet special needs.

Programs include customized on-site training in manufacturing and industrial technologies, ISO 9000 skills, managerial and supervisory skills, computer skills, workplace literacy, basic skills development, English as a Second Language, total quality management, and implications of workplace legislation (e.g. the Americans with Disabilities Act). On-site credit programs can also be arranged to enhance employee development.

The Business and Industry Training Center provides the Lake County business community with the quality, cost-effective training programs needed to be competitive in the quality-oriented global economy. For more information, call (847) 543-2027.

Community Development Programs

Since 1991, the College of Lake County, in conjunction with the 19th Judicial Circuit of Illinois, has offered the Defensive Driving Program. The courses provided are accredited by the National Safety Council and are offered in both a four-hour and an eight-hour format. Motorists who receive a minor traffic violation in Lake County may opt to take these classes under court supervision. The courses emphasize defensive driving habits, including rules of the road, collision prevention tactics, and other daily driving situations that motorists may encounter.

Other Community Development Programs include the Family Parenting Program for parents of minor children who are seeking a dissolution of marriage. This two- hour class deals with the effects of divorce on children and how to help children through this emotionally difficult time in their lives.

Another program is Volunteer Probation Support. In conjunction with Court Services of Lake County, the College recruits, trains and assigns volunteers to work with adults and juveniles during their probation periods, providing support, mentoring, and supervision.

Finally, the College of Lake County offers the BASSET (Beverage Alcohol Sellers and Servers Educational Training) program, an alcohol awareness program for establishments that serve or sell liquor in Lake and other counties.

Computer Training for Business People

This training is intended for those who wish to immediately gain workplace skills. Half-day and full-day workshops are offered during weekdays, evenings, and Saturdays.

Training sessions are offered on popular business application software, including Excel, PageMaker, PowerPoint, Access, Internet, Microsoft Office Suite, Windows 95, MCSE 2000, and A+ Computer Technician.

The Business-Industry Training Center also provides on-site training in the workplace, bringing its laptop PC computer lab to businesses for customized training in most computer topics, including Advanced Microsoft Office Applications. Call (847) 543-2747 for more information.

Procurement Technical Assistance Center

The PTAC is a resource for businesses interested in selling products or services to the federal, state, or municipal governments. Resources available include one-on-one counseling, seminars, government marketing assistance, technical and reference assistance and computer-aided bid-lead identification. Additionally, the center frequently offers seminars and other training opportunities on topics such as e-commerce, advanced issues in government contracting, and other subjects that are directly connected to government contracting.

Through these tools, the Center provides assistance to businesses in all phases of government contracting. Additionally, the center provides assistance to many one time callers who have specific questions and requests.

The PTAC program is developed in cooperation with the U.S. Small Business Administration, the Illinois Department of Commerce and Community Affairs, and the College of Lake County as a service to small businesses under cooperative agreement #1-7620-0014-18. The PTAC offices can be reached at (847) 543-2025 or via email at clcptac@clc.cc.il.us.

Public Service Institute

The Public Service Institute provides Lake County with a resource for linking public service agencies and training and development resources that would otherwise be unavailable or cost prohibitive. The Institute was established in 1996 to coordinate resources and assist with staff development for numerous agencies that provide public and civic services to the residents of Lake County. Training options include courses offered on campus as well as custom-designed programs that can be delivered off-site. By working in cooperation with the Business and Industry training center, courses can be tailored to the unique needs of public service entities. Working relationships have been established with agencies including the Lake County Fire Chiefs Association, Lake County Council Against Sexual Assault (LaCASA), Lake County Municipal League, as well as several other community organizations.

Criminal Justice Institute

The Public Service Institute also offers a variety of programs for law enforcement through the Criminal Justice Institute Program. Gang awareness, instructor development, hazardous materials, driver training, and a variety of other specialized courses and seminars have made high-quality training accessible to local law enforcement agencies at a fraction of the cost of using distant vendors. The Criminal Justice Institute is a federally certified training center that has a unique advantage in that it makes use of high-tech simulator systems for emergency vehicle operations and firearms judgment training.

Small Business Development Center

The Small Business Development Center (SBDC) is part of a national network of over 900 centers whose mission is to help both existing businesses and potential entrepreneurs succeed by providing managerial and technical assistance. The SBDC accomplishes its mission by a number of means, including one-on-one consulting on all aspects of business operations, educational and training opportunities encompassing a variety of workshops and seminars, providing access to resources and information including SCORE (Service Corp of Retired Executives) Counseling, a Resource Center, and assistance in identifying and securing financing to start or expand a business. Workshop/seminar areas include business start-up, business planning, marketing, tax issues, internet, record keeping and bookkeeping, buying and selling a business, computer software and hardware, and international trade and finance options.

The SBDC program, in existence at the College since 1986, is developed in cooperation with the U.S. Small Business Administration. Illinois Department of Commerce and Community Affairs, and the Small Business Development Center at the College of Lake County as a service to Illinois small businesses under cooperative agreement 1-7620-0014-18. The SBDC office can be reached at (847) 543-2033.

Illinois Employment and Training Center

The Illinois Employment and Training Center (IETC) is located on the north campus. The IETC offers one-stop job and career assistance to Lake County job seekers and CLC students. The building houses the College's Career and Placement Services office, the Illinois Department of Employment Security, the Lake County Workforce Development Department, the Regional Office of Education, and the Lake County Education to Careers Partnership. The Career and Placement Services office provides resources and individual assistance to students to help in their career and job searches. The Illinois Department of Employment Security offers access to local, state, and national job listings and processes unemployment insurance claims for individuals. The Lake County Workforce Development Department provides career and training assistance to qualifying individuals. The Regional Office of Education provides services for elementary and secondary school districts throughout Lake County. The Education to Careers Partnerships helps to create bridges between students' academic experiences and the world of work. For more information or assistance from any of these offices, stop by the IETC (building E) or call (847) 543-7400.

Other Educational Options

Cooperative Education

The Cooperative Education (CO-OP) program provides eligible students with the opportunity to earn college credits for new learning in a present or new job.

The Cooperative Education department helps students seeking work experience prepare for the job search by providing resume help, mock interviews, and job leads. Also offered is a one-credit seminar that focuses on job search skills and the psychology of the workplace. The seminar is required for those students participating in their first CO-OP work experience, but may be taken separately or prior to the work experience. To earn credit for work experience, each student must develop a written educational plan that includes measurable learning objectives. Guidance and supervision are provided regularly by faculty sponsors in cooperation with the employer.

For more information, contact the Coordinator for Service Learning and Cooperative Education at (847) 543-2058. See EWE Courses on page 166.

Prerequisites:
1. Nine credits toward the student's career or transfer program (12 credits in the specialty option if AAS in CIS).
2. CO-OP Coordinator and faculty sponsor approval.

Service Learning

Service learning integrates meaningful community service into a course in a manner that supports and enhances instructional objectives. It promotes a greater understanding of the community while reinforcing concepts learned in class. Contact the Coordinator of Service Learning and Cooperative Education at (847) 543-2058, or stop by the Career Resource Center in the IETC building on the Grayslake Campus for more information about service learning opportunities available at CLC.

Volunteer Opportunities

CLC offers many options for those interested in volunteering. Each semester the College conducts a volunteer fair for people interested in meeting with representatives from Lake County organizations. A bulletin board listing community volunteer opportunities is located on the Grayslake campus, next to Lancers and is updated regularly. Students may also assist with the identification and coordination of volunteer projects, or register for EWE 121 Introduction to Volunteerism to learn more about the topic. This one credit course focuses on actual volunteer experience. For more information, contact the Coordinator of Service Learning and Cooperative Education at (847) 543-2058, or stop by the Career Resource Center in the IETC building on the Grayslake campus

International Studies

The College of Lake County provides students with a variety of courses as well as short-term international study tours which contribute to an understanding of the relationships between the cultural, economic, and political systems of other nations and our own. The college also participates in foreign study programs that give students an opportunity to reside and study in another country for an extended period.

Resident Foreign Study Program

Studying abroad affords students a unique opportunity to integrate the distinctive resources available in other countries to enhance and broaden their understanding of these cultures. In addition to course-related travel and activities, students may have the occasion to travel to other countries.

The College of Lake County is a member of the Illinois Consortium for International Studies and Programs which consists of Illinois community colleges and Illinois State University. The consortium has an affiliation with Christ Church College of Canterbury, Kent, England, and Salzburg College in Salzburg, Austria. These affiliations permit consortium members to provide their students with a resident foreign study program during fall and spring semesters. The curriculum emphasizes courses in art, foreign language, history, humanities, literature, and music. All courses may be used to fulfill graduation requirements or as electives for the transfer degree. The College of Lake County also offers other residential international study opportunities as well as work-study and volunteer experiences through its membership in the Council for International Educational Exchange.

Requirements for admission to most foreign study programs include completion of 30 hours of college credit with a minimum GPA of 3.0 and two letters of reference. For more information, contact International Education Coordinators, Nancy Cook, D113, (847) 543-2562; Bob Kerr, A237, (847) 543-2533; or Homer Yamsuan, (847) 543-2733.

Field Study

In addition to providing education in the classroom, lecture hall, and laboratory, CLC faculty members also direct field study. A variety of biology, geology, history and humanities courses make the Rocky Mountains, Europe, Asia, or Latin America their classrooms. The class schedule provides information about the specific field study or travel courses which are being offered in a given semester.

Honors Program

For students who seek an enriched academic experience, CLC offers the Honors Program. The program will begin on a limited basis in the 2001-2002 academic year. Qualified students will be able to enroll as honors students in ENG 121 (English Composition), SOC 121 (Introduction to Sociology), and MTH 145 (Calculus and Analytic Geometry I).

Honors work emphasizes independence and critical thinking skills. Students should anticipate different types of assignments, research with primary sources, increased group activity, and possible field trips. Acceptance into the Honors Program is determined by the CLC Honors Advisory Committee (HAC). The HAC reviews the following criteria:

- Application form
- 2 Letters of recommendation
- 3.5 (on a 4.0 scale) high school GPA
- 3.25 (on a 4.0 scale) college GPA
- High school class rank in the top 10%
- ACT of 25 or combined SAT of 1000
- Personal interview
- Work/community experience

The application form and the letters of recommendation are required, and acceptance will be determined based on a candidate's ability to meet at least 2 of the above additional guidelines. Meeting these requirements, however, does not guarantee acceptance into the program.

For questions about honors coursework or program requirements, please contact Mike Butterworth at (847) 543-2946, or Nick Schevera at (847) 543-2959.

Honors Program Philosophy Statement
The honors program at CLC is dedicated to providing students with opportunities to enrich their academic and community experiences. It is dedicated to reflecting the diversity of the college community as a whole.

Telecourses

Several courses in business, social science, communication arts, physical science, humanities, and physical education can be taken by television. This delivery system allows students to work on courses at home on cable television. Students may also work on courses on video tape, either at home or at one of several local libraries. For information about telecourses, call the Educational Technology Department at (847) 543-2074.

Online Courses

The College also allows students to take courses from the convenience of their own homes using the Internet. Students with Internet access may take CLC courses at any time and any place, while maintaining the same high quality education and support services they would receive in a more traditional, classroom setting.

Please keep in mind that online courses are not for everyone; there are technical requirements as well as the need for self-motivation, time management skills, and the ability to work independently in some cases. However, online courses have proven to be effective alternatives to on-campus courses for many people. For more information, visit the CLC online web page: http://clconline.clc.cc.il.us.

Illinois Virtual Campus

CLC is one of more than 60 colleges and universities participating in the newly created Illinois Virtual Campus (IVC), an **online** catalog of services and distance education opportunities offered by Illinois community colleges and four-year universities. This includes both a listing of courses and student support services available online.

The IVC can be accessed on the Internet at http://www.ivc.illinois.edu.

To learn more about IVC resources, contact Kris Dahl in the Counseling Center at 543-2353 or kdahl@clc.cc.il.us.

Distance Learning Network

The Distance Learning Network links CLC with six other colleges and universities to expand educational opportunities for CLC students. CLC students may attend classes and earn credits offered by CLC and other institutions without leaving the campus.

The Distance Learning program was developed by the North Suburban Higher Education Consortium which includes CLC, DePaul University, National-Louis University, Oakton Community College, William Rainey Harper College, Northeastern Illinois University, Northwestern University, Elk Grove High School, Maine Township High Schools, Illinois Student Assistance Commission and North Suburban Library System. Distance Learning classrooms are located at four sites within Lake County: CLC's Grayslake and Lakeshore Campuses, the Lake County High Schools Technology Campus, and Southlake Educational Center. The program is funded by a $15 million state-wide telecommunications initiative developed by the Illinois Community College Board and the Illinois Board of Higher Education. Through the network, programs from each participating institution will be offered to CLC students and CLC classes will be made available to students at other colleges. Transmitted through a high-speed telecommunications network and supported by classroom television monitors and microphones, Distance Learning technology allows both instructor and students to see and hear each other at all classroom sites. For more information, call the Educational Technology Department at (847) 543-2074.

Admission, Advisement & New Student Information

Admission Policy

The College of Lake County provides a wide range of learning opportunities to meet the various educational needs of students from diverse educational backgrounds. The College welcomes all who may benefit from its courses and programs of study. An individual will be admitted to the College by completing and submitting the Application for Admission form. The college serves those who are high school graduates, others who are eighteen years of age or older, and individuals under eighteen years of age who meet established criteria.

Admission to the College does not guarantee entrance into all courses or programs of study. Entrance into specific programs may depend on other criteria such as age, evidence of language and mathematics skills, and level of education. Students taking college level courses must demonstrate college level competency in language and mathematics. In addition, students are required to complete specified prerequisites prior to enrollment in certain courses.

The College reserves the right to limit enrollment because of space or budget restrictions, to establish selective admission requirements, and to give preference to residents of Community College District 532.

Please see page 257 for an Application for Admission form and specific requirements.

Admission to Associate in Arts, Associate in Science, Associate in Engineering Science, and Associate in Fine Arts

To qualify for unconditional admission to these programs, students must provide evidence that they have attained a certain level of knowledge in the arts and sciences through previous learning. Evidence may be provided by observing the following procedures:

1. Successfully complete the Admission requirements. See page 254 for more information.
2. Submit either a high school transcript or a student profile report from the American College Testing (ACT) Program showing the achievement listed below:

   2.1 High School Transcript showing successful completion of the following:

   - **Four years of English** emphasizing written and oral communication and literature.
   - **Three years of social science** emphasizing history and government.
   - **Three years of mathematics** including introductory through advanced algebra, geometry, Trigonometry, or fundamentals of computer programming.
   - **Three years of science** including laboratory science.
   - **Two years of electives** from any combination of foreign language, music, vocational education or art.

   Up to three of the 15 required units of course work may be redistributed by deducting no more than one unit from each of the categories of social science, mathematics, science, and electives, and completing those units in one of the other categories.

   2.2 ACT Student Profile Report showing the completion of the high school course distribution requirements listed above or standard scores of 21 or higher for English, reading, mathematics, and science reasoning.

   2.3 SAT Report showing scores of 500 or higher for verbal and mathematics.

The Office of Admissions and Records will consider exceptions to these procedures on an individual basis for students who have completed 30 or more semester hours of course work with grades of C or better from an accredited college or university, those with an associate degree from an accredited college or university, and those who present equivalent course work or test scores.

Students who are unable to provide any of the forms of information indicated above will be conditionally admitted to the degree program and will be required to complete all of the following prescribed College of Lake County courses:

English:	ENG 121-English Composition I;
Speech:	SPE 121-Fundamentals of Speech (not AES);
Mathematics:	Any mathematics course required for the A.A., A.S., A.E.S., or A.F.A. degree in this catalog;
Science:	Any Lab Science course from the list required for an A.A., A.S., A.E.S. or A.F.A. degree in this catalog (see pages 46-62);
Social Sciences:	Any social science course from the list required for an A.A., A.S., A.E.S., or A.F.A. degree in this catalog;
Humanities:	ENG 122-English Composition II or any humanities course from the list required for an A.A., A.S., A.E.S., or A.F.A. degree in this catalog (see pages 46-62).

Please see the section on Advising on page 18 of this catalog for further information.

Admission to Limited Enrollment Health Career Programs

Health career programs are open to a limited number of students. Medical laboratory technology, health information technology, registered nursing, dental hygiene and medical imaging students must complete a special screening procedure.

Please see the section on Associate in Applied Science Programs of Study on pages 88-136 of this catalog for further information including selective admission requirements.

Dual Admission

The College of Lake County has dual admission agreements with Roosevelt University, Northern Illinois University, Barat College, University of Wisconsin-Parkside, and Northeastern Illinois University. These agreements allow eligible students the opportunity to gain admission to the College of Lake County and a transfer university at the same time. Students participating in dual admission programs benefit by receiving early notification from their transfer schools while enrolled at CLC. For more information about dual admission programs, contact the Counseling Center.

For Students Who Are Younger Than 16 Years of Age

A student under sixteen years of age must be judged by both the high school and the College of Lake County to possess both exceptionally high academic ability and maturity to handle the discipline and personal skills required for successful completion of college work.

A student under sixteen years of age is required to submit the credentials outlined below to the Office of Admissions and Records:

1. Completed CLC Application for Admission form.
2. Completed CLC Secondary School Reference form.
3. One of the following forms of evidence demonstrating exceptionally high academic ability (not required if student enrolls for only continuing education activities):
   a. Official transcript(s) of school record(s) showing
      1) Successful completion of the most advanced course offerings by the high school in the subject area in which the student wishes to enroll at CLC

      or

      2) Successful completion of all courses offered by the high school in the subject area in which the student wishes to enroll at CLC.
   b. Official scholastic aptitude and/or achievement test score reports ranking the student in the top 10 percent in the subject area in which the student wishes to enroll at CLC.
4. Recommendation from the high school department chairman in an area comparable to the intended course or program of study at CLC.
5. Recommendation from the dean at CLC who is responsible for the course or program of study in which the student wishes to enroll at CLC.

For International Students

International students must submit the credentials outlined for admission to the International Education Coordinator, Bob Kerr, Social Sciences (A237, (847) 543-2533), or Juan Arroyo, International Student Admissions Specialist (B105, (847) 543-2733) and must meet the following requirements:

1. International students must receive an F-1 Student Visa to study at CLC.
2. They must be accepted as a student at the college, presenting the equivalent of a U.S. high school diploma (transcript translated into English by an approved accreditation bureau) with the requisite credits for admission to the College. This is possible even if the student needs to take English as a Second Language. However, until the student completes the necessary courses or passes the Academic Proficiency Test, the student is able to take only a limited number of courses in the Skills Enhancement Program or English as a Second Language.
3. The student must show financial responsibility by demonstrating that he or she has access to $16,600 U.S. dollars in a bank account (amount subject to change) that can be used to support the student. The money does not have to be in the student's name. If there is a sponsor, the sponsor must sign an affidavit attesting that the sponsor is willing to use the money to support the student. Should the student be bringing dependents an additional $5,000 per academic year for the spouse and an additional $4,000 for each child must be available and certified.
4. The student must intend to return to his/her home country at the end of the period of study.
5. At this point, CLC may issue an 1-20 immigration form to the student. The student must take the 1-20 form, financial forms, letter of acceptance to CLC, and evidence of intent to return to his or her home country to the U.S. Consulate Office in his or her home country. This office actually issues the F-1 visa.
6. The student must be a full-time student, registering for at least 12 academic credit hours for each of the fall and spring semesters.
7. The student must pay out-of-state tuition.
8. Each student must carry the health/accident insurance policy approved by CLC for international students.
9. International students may not work except under limited circumstances.
10. Deadlines: May 1 for fall semester, November 1 for spring semester and April 1 for summer session.

For more information, contact the International Education coordinators listed above.

Registration Steps For Credit Classes: New Students

Before You Start...

Students thinking about enrolling at the College of Lake County for the first time, may want to start with a campus tour. Call the Student Recruitment Office at (847) 543-2090 for an appointment. For information on financial aid, contact the Financial Aid Office, (847) 543-2062.

STEP 1: Attend a New Student Orientation

All new degree-seeking students are encouraged to attend a New Student Orientation session to learn more about the College's programs, services, admission requirements, and registration procedures. Times and dates are published in the class schedule, or call the New Student Orientation Coordinator at (847) 543-2486. Registration for the sessions is necessary.

STEP 2: Submit an Application for Admission and Required Credentials

Submit a completed CLC Application for Admission to the Admissions and Records Office. Also provide any required credentials as proof of meeting prerequisites. Send college transcripts to CLC for evaluation. Pick up a college catalog at the Student Recruitment Office or Counseling Center, if you plan to earn a degree or certificate. See page 257 for an application form and page 254 for admission requirements.

STEP 3: Meet Prerequisites

Meeting prerequisites is necessary before enrolling in most college courses. You can meet the prerequisites by demonstrating language proficiency or math proficiency through CLC's Academic Proficiency Test; ACT or SAT scores; high school transcripts; GED scores; TOEFL scores; or previous college course work. See page 254 for specifics. In addition, you may need to take placements tests for math, chemistry, computer information systems, and/or other courses. Many courses have specific course prerequisites (courses that must be taken prior to the one you wish to take) or co-requisites (courses that must be taken simultaneously).

STEP 4: Meet with a Counselor

Meet with a counselor for help with your educational planning. If you are unable to meet both the language and math proficiency requirements, you must meet with a counselor before you register. If you are a degree-seeking student and are unable to meet one of the proficiency requirements, you must meet with a counselor or advisor to select the most appropriate courses.

Counselors are available 8:00 a.m.-8:30 p.m., Monday through Thursday and 8:00 a.m.-4:30 p.m. Friday, in Room C110 at the Grayslake campus (847-543-2060). Counselors are available by appointment at the Lakeshore campus (847-543-2186) and Southlake Educational Center (847-478-1833).

STEP 5: Select Classes and Register

Use the class schedule to select your classes and times. You may register by touch-tone telephone by calling (847) 223-1111 or via the Web at www.clc.cc.il.us.selfserv.htm. If you need help registering, you may come to the registration area at the Grayslake campus, Lakeshore Campus, or Southlake Educational Center. See the current class schedule for registration dates and times, and additional satellite registration sites.

STEP 6: Pay Tuition and Fees

Pay tuition and fees by the due date given you when you register. The college offers several payment options, and, if you qualify, financial aid may be available. See pages 21-24 for tuition and fees and financial information.

Academic Advisement and Counseling

Student success in college is linked with quality academic advising.

Academic Advisement:

All continuing CLC students who have selected a program of study should meet with a faculty advisor.

All full-time faculty members are also academic advisors and are available during the fall and spring terms. For information on how to contact a faculty advisor, call the appropriate division office listed below. Division offices are located on the Grayslake campus.

Biological and Health Sciences	(847) 543-2042	Room C140
Business	(847) 543-2041	Room A143
Communication Arts, Humanities and Fine Arts	(847) 543-2040	Room B237
Engineering, Math and Physical Sciences	(847)543-2044	Room B162
Social Sciences	(847)543-2047	Room A244

Counseling:

Students meet with a counselor if they are

- **undecided** on a program of study
- **new** to CLC
- **deficient** in language or mathematics skills
- **returning** to CLC after two or more semesters of absence
- seeking **transfer** information for a specific institution
- on **academic restriction**
- in need of more extensive **counseling services**

(See page 18 for list of counseling services and locations.)

Advising Prior to Registration

The following students must contact an appropriate advisor or counselor before registering:

- Degree or certificate seeking students prior to registering for their **19th** and **41st** transfer or career credit hour
- Students on **academic restriction**
- Students deficient in language or math competencies
- Conditionally admitted students who plan to transfer and have exceeded 40 career or transfer credits (See Admission to A.A., A.S., A.E.S., or A.F.A. Degree Programs for more information on conditional admit on page 16.)

For information on referrals, see page 18, Academic Advising and Counseling, or call the Counseling Center at (847) 543-2060.

Graduation Planning

Advisors help students who have decided on a program of study and have selected courses to meet all the graduation requirements for an A.A., A.S., A.E.S., A.F.A., or A.A.S. degree. Counselors help A.A. and A.S. students who are undecided on a major.

Advising Responsibilities of Advisors

Academic Advisors help students with long-term and short-term academic planning, assist students in developing a course schedule, provide information about programs of study, explain CLC graduation requirements and College policies, and refer students to other College staff and services.

Advising Responsibilities of Students

Students are responsible for contacting an academic advisor and preparing for the advising session by being familiar with the information in the CLC catalog and graduation requirements, reviewing the course schedule each semester, having an idea of the courses they plan to take, and being ready to discuss their interests and/or goals. Students who are unclear about their educational goals should seek assistance from a counselor to develop those goals.

Financial Information

Tuition and Fees

Tuition and fees are subject to change through actions of the CLC Board of Trustees or changes in the calculation of out-of-district fees in accordance with the state formula. Regular tuition and fees effective for Fall 2001 are as follows:

In-District	
Tuition (per credit hour)	$50.00
Comprehensive Fee (per credit hour)	$ 4.00
Technology Fee (per credit hour)	$ 1.00
Total Tuition and Fees	$55.00

Tuition and fees for non-credit courses (courses which do not lead to a state-approved degree or certificate) cover the cost of instruction. No state or local tax monies are used to support these courses. Out-of-district and out-of-state tuition is determined on a semesterly basis. Please refer to the current class schedule for this information.

The comprehensive fee supports student activities, student services, and infrastructure improvements, including child care, program board activities, the student newspaper, and tutoring as well as helping defray the costs of parking lot improvements and campus safety expenditures.

Student Residency Status

Students are classified according to residency status at the time of admission to the College for purposes of tuition assessment and enrollment.

Proof of Residency

Evidence of district residency shall be based on ownership and/or occupancy of a dwelling in Community College District 532 and may be verified by displaying either an Illinois driver's license or identification card issued by the Illinois Secretary of State's Office or an Illinois voter identification card.

Residents of the College District

Students who are at least eighteen years of age and who have occupied a dwelling within Community College District #532 for at least thirty days prior to enrolling at the College of Lake County are considered "in-district" unless they are:

- Federal Job Corps workers stationed in the district
- Inmates of State or Federal correctional/rehabilitation institutions located in the district
- Students attending under the provisions of a charge-back or contractual agreement with another community college
- Students attending a post-secondary educational institution in the district who have not demonstrated through documentation a verifiable interest in establishing permanent residency
- Unemancipated students under eighteen who have at least one (1) parent, step-parent, or court-appointed guardian who meet the above criteria.

Community College District 532 is defined to include residents of the following Lake County, Illinois public high school districts: Adlai E. Stevenson, Antioch, Grant, Grayslake, Highland Park, Deerfield, Lake Forest, Lake Zurich, Libertyville, Mundelein, North Chicago, Round Lake, Warren, Wauconda, Waukegan, and Zion-Benton.

Residents of Illinois, Out-Of-District Students

An out-of-district student is one who resides in Illinois but is not a resident of Community College District 532 as defined above. Lake County Illinois residents living within the Barrington public high school district are classified as out-of-district Illinois resident students.

Out-Of-State Residents

An out-of-state resident is one who is not a legal resident of the State of Illinois, including international students and other non-immigrant aliens. A legal resident is a citizen, a legal permanent resident or one who can demonstrate evidence of interest in becoming a legal permanent resident.

Senior Citizen Tuition

All in-district residents who are sixty years of age or older at the time of registration may enroll in credit courses offered by the College at one-half the regular tuition rate, with all other fees remaining unchanged. All residents of the college district who are sixty-five years of age or older at the time of registration and who qualify financially according to Illinois Statute may enroll in credit courses offered by the College without paying tuition or activity fees. Contact the Financial Aid Office for details.

Business Educational Service Agreement

Students who live outside of the College of Lake County's district and are currently employed thirty-five or more hours per week in the College's district may enroll at CLC under the Business Educational Service Agreement and pay the current in-district tuition rate, including prevailing comprehensive fee, regardless of their place of residence. For more information, contact the Student Recruitment Office at (847) 543-2090.

In-District Military Personnel Tuition

Military personnel who are citizens of the United States and who are on extended active duty in one of the uniformed services of the United States and who are stationed and present in Community College District 532 in connection with that service, will receive the current in-district tuition rate including the prevailing activity fee by displaying a valid United States uniformed services identification card. Spouses and children of such military personnel are also eligible for the in-district tuition rate.

Fees

Commencement

A commencement fee, which includes cap and gown rental, is assessed to each student who participates in the commencement exercises. The College issues the diploma free of charge and it is mailed approximately one month after completion of degree or certificate requirements.

Transcripts

A fee of $1.00 is charged for each official transcript of a student's complete academic record.

Course Fees

Course fees are charged for some courses that incur extraordinary expenses for consumable supplies used by students or that have an unusual delivery system, e.g. private lessons.

Additional

Additional student expenses may be incurred for specific classes or specialized instruction as indicated in the current semester schedule of classes.

Method of Payment/Installment Plan

Students may use cash, check or credit card (VISA, MASTERCARD, DISCOVER and AMERICAN EXPRESS) for payment of tuition and fees, and for book store purchases. Students may also pay tuition over a period of time. For details on Tuition and Fees Installment Plan, consult the current class schedule.

Approximate Costs for Full-Time Students

Many students wonder about what they will have to spend to attend CLC for an entire year as a full-time student. To help answer that question, the College has developed two standardized budgets for the 2001-2002 school year. There may be minor variations in these figures due to tuition increases or changes in federal guidelines.

Approximate Dependent Student Budget

(Based on 9 months)	
Tuition and Fees	$1,540.00
(Based on 14 credit hours per semester)	
Books and Supplies	600.00
Room and Board	1,500.00
Personal Expenses	1,400.00
Transportation	$1,080.00
	$6,120.00

Approximate Independent Student Budget

(Based on 9 months)	
Tuition and Fees	$1,540.00
(Based on 14 credit hours per semester)	
Books and Supplies	600.00
Room and Board	3,240.00
Personal Expenses	1,560.00
Transportation	1,320.00
	$8,260.00

Joint Agreements and Tuition Chargeback for CLC District 532 Residents

Students who wish to pursue programs not available at the College of Lake County may do so in one of two ways. First, CLC has joint agreements with neighboring community colleges for a number of programs. Through joint agreements, residents of District 532 may attend another community college at the other school's in-district rates. All joint agreements are listed on pages 44-46 of this catalog.

A second option for students wishing to pursue programs not available at CLC is charge-back. Through the charge-back system, an individual applies for approval to register at another Illinois community college thirty days before the beginning of the semester. If approved, the student pays the in-district tuition rate for the college he or she is attending and the College of Lake County pays the difference between the in-district and out-of-district rate to the other institution. Charge-backs are available only for programs resulting in a degree or certificate and not for individual courses.

Students who wish to apply for a joint agreement or a charge-back may do so by contacting the Office of the Assistant Vice President, Educational Affairs at (847) 543-2422.

Tuition Charge-back Out-of-District Residents

Partial student support is available to some Illinois residents who are not residents of the CLC district. Contact your local community college for the proper forms and information. If you do not live in a community college district, contact your local high school.

Attendance

The responsibility for attendance at all scheduled class and laboratory meetings rests with each individual student. When students are absent for reasons of illness or emergency, they are responsible for course work missed and should consult with the instructor before or at the next meeting of the class. Students who find it necessary to be absent from a class should inform the instructor in advance, if possible.

If students decide that they are unable to complete a course, it is their responsibility to officially withdraw from (i.e. drop) the course by calling (847) 223-1111, using the web at www.clc.cc.il.us/selfserv.htm or by going to either the Lakeshore Campus, Southlake Educational Center, or the Admissions and Records Office at the Grayslake Campus.

The College may administratively withdraw students who have never attended the class or have attended so sporadically that they would not be able to complete the course requirements.

Withdrawing from (dropping) a Course

To officially withdraw from a course, students may call the automated student information system at (847) 223-1111, use the web at www.clc.cc.il.us/selfserv.htm or go to the Office of Admissions and Records (B-101) at the Grayslake campus, the Lakeshore Campus in Waukegan, the Southlake Center in Vernon Hills, and the Extension Office (Bldg 2) at Great Lakes. It is the student's responsibility to make sure that each step of the withdrawal transaction is completed. Students should verify their transaction before exiting the system.

The date of official withdrawal is important for determining both the tuition/fee refund and final grade for the class. For example, if the class meets for sixteen weeks and if the withdrawal occurs before the end of the fourteenth calendar day (including weekends and holidays) starting with the first day the class is scheduled to begin, the student will receive a full refund of tuition and fees paid for the class. Please see the refund schedule in the next column for more information.

If a class meets for sixteen weeks and if the withdrawal occurs before the end of the fourth week (twenty-eight calendar days), the student's permanent record (transcript) will not show enrollment in the course. If the withdrawal occurs after the fourth week and before the end of the 11th week, a final grade of W will be recorded. After the 11th week, the student must contact the instructor directly to withdraw. If the student is passing, the final grade will be W. If not passing, the final grade will be F. Deadlines are prorated for classes that meet other than sixteen weeks. All one-day classes must be dropped one day prior to the start of class to avoid showing enrollment on the student's permanent record (transcript).

Refund Schedule

Tuition and fee refunds will be granted to eligible students on the basis of the schedule outlined below. The number of days indicated are calendar days starting with the first day the class is scheduled to begin. Withdrawals (drops) received on Monday for classes that began the previous Friday evening (after 4 p.m.), Saturday, or Sunday will be back-dated to Friday.

REFUND SCHEDULE

Length of Class	100% Refund Prior to and Through	No Refund
12 or more weeks	1-14th day	15th day
8 through 11 weeks	1-7th day	8th day
4 through 7 weeks	1-2nd day	3rd day
Less than 4 weeks	1 st day	2nd day

A full refund of tuition and fees paid will be granted if the college cancels a class. Under special circumstances and with permission from the appropriate dean, students may exchange one class for another without additional tuition and fee charges. If you are unable to attend class due to uncontrollable and unforeseen circumstances such as extended hospitalization, a proration of the tuition and fee refund may be made based upon a documented application submitted to the Dean of Business Services and Finance in Room A-101.

Financial Assistance Available to Students

Financial aid is designed to help bridge the gap between a student's resources and the expenses associated with attending college. There is usually some type of financial aid available to help students, no matter what their financial status may be.

There are three types of aid available: grants, loans, and employment. A financial aid counselor will determine the best possible combination of these resources for the student. Financial aid counselors use a formula to calculate financial need. Factors such as family size, savings, and income are taken into consideration. College costs minus expected family contribution equals financial need.

There are special programs available to veterans and senior citizens. Loans which are not based on financial need may also be available to students to meet emergency expenses. Another source of financial aid is the generosity of private citizens and local business organizations.

If applying for financial aid, make certain to complete both the free Application for Federal Student Aid and the CLC Financial Aid Application. Most students, except veterans, must have this information on file to be considered for financial aid monies. There is a separate form for veterans which also may be obtained from the Financial Aid Office.

CLC reports any veterans on academic restriction to the Veterans Administration. Veterans will be required to complete VA Form 22-8873 (Supplemental Information For Change Of Program Or Re-enrollment After Unsatisfactory Progress Or Conduct) to have any benefits reinstated. Refer to page 35 for an explanation of the Academic Standards Policy.

Students should be aware that there have been changes in the federal regulations concerning refunds and repayments of financial aid funds received by students who withdraw completely from classes within a semester. Students who withdraw totally from their classes should contact the Financial Aid Office to determine how these regulations affect them. Some students in this type of situation could be required to repay financial aid received.

For more information about financial aid programs, refer to the current Financial Aid Brochure or contact the Financial Aid/Veterans Information Office located in Room B114. Every effort is made by the Financial Aid Office to help students identify and take full advantage of financial aid sources to help pay for the costs of college.

College of Lake County Foundation Scholarships

The College of Lake County Foundation is a private non-profit organization. One of its purposes is to raise scholarship funds for students at the College of Lake County. Most Foundation scholarships are designed to benefit students who need financial assistance, even those who do not qualify for other forms of assistance. To learn more about the Foundation's scholarship program, contact the Director of Financial Aid (Office B114) or pick up a scholarship booklet in the Financial Aid Office (B114) on the Grayslake campus. Booklets are also available at the Lakeshore Campus and the Southlake Educational Center.

The CLC Foundation also funds innovative educational and cultural programs involving faculty, staff, and students. And the CLC Foundation serves as an administrative channel for accepting gifts to the College which may include cash, securities, planned gifts, major gifts, works of art, and library materials. All gifts to the CLC Foundation are tax deductible to the extent allowed by law.

The CLC Foundation Office Complex is B148-B152 on the Grayslake campus. For more information, call (847) 543-2488.

Student

Development

Addressing Student Concerns

An overview of the various ways in which student concerns can be addressed is provided in the Guide for Addressing Student Concerns, which may be obtained from the Vice President of Student Development Office, Room B108. ***This information is also posted throughout the college.***

Child Care

CLC offers affordable child care at its nationally accredited Child Care Center on both the Grayslake and Lakeshore campuses. A highly qualified staff provides day and evening care for 2½ to 12 year olds in separate programs for preschool and school-aged children. Children are enrolled in advance for certain times based on their parents' class, study, and work schedules. Spaces are limited. Holiday child care is available for school-aged children on specified days. For more information on fees, times, and registration, call the Grayslake campus at (847) 543-2053 or the Lakeshore Campus at extension 2150.

Counseling

The services of professional counselors are available at three locations:

Counseling Center, Room C 110, Grayslake Campus, 19351 W. Washington Street, Grayslake, IL 60030-1198
Hours: Monday through Thursday - 8:00 am - 8:30 pm
Friday 8:00 am - 4:30 pm
For appointments, call (847) 543-2060.

Lakeshore Campus, Student Services Center, Room 211, 111 North Genesee Street, Waukegan, IL 60085
For appointments, call (847) 623-8686.

Southlake Educational Center, 1120 South Milwaukee Avenue, Vernon Hills, IL 60061
For appointments, call (847) 478-1833.

Services Available Through the Counseling Centers

- **Pre-enrollment counseling** - Counselors assist students in determining the appropriateness of a program and an educational plan prior to registration.
- **Selecting a major** - Counselors work with undecided students to help them select a program and curriculum which meets their life and career goals.
- **Educational development** - Besides working with undecided students, counselors also help students who have not been successful in school and who have been placed on academic restriction. Restricted students work with a counselor to develop an academic plan. They are helped to select appropriate classes and to learn strategies for success in school through individual conferences, workshops and classes in which they can learn study skills, methods for managing time, test-taking techniques, and other strategies for becoming a better student. The counseling staff also assists students whose reading, writing, or mathematics skills are below college level. See PDS 120.
- **Career development** - Through assessment techniques and career information, students are helped to set and realize career-related goals. Methods may include individual or group counseling as well as credit or non-credit classes. See PDS 122.
- **Personal development** - Counselors assist with personal growth and life planning issues and with personal problems that interfere with progress in school by providing individual or group sessions or referrals to appropriate community agencies. See PDS 121.
- **Transfer planning and information** - Counselors can assist students with transfer planning. Printed Transfer Guides are available outside the Counseling Center (Grayslake) and Lakeshore Student Services Center (Waukegan) for public universities within Illinois and many private colleges. Admission information, including application forms and information on academic programs and transfer scholarships, is also available in the Counseling Center.
- **Information and referral** - Much information is available in books and on computers in each counseling center. Students may also confer with counselors concerning work, school, community agencies, and resources at the College to resolve personal, academic, and career concerns.
- **Testing** - A counselor can help students gain more knowledge about themselves and how they fit into the world of work through the use of assessment tests.
- **Credit Classes** - Several Personal Development seminars are offered by the counseling faculty. Please see the PDS listings in the course section of this catalog.

Campus Safety

A truly safe campus can only be achieved through the cooperation of all students, staff, and faculty. For more information, contact the Campus Safety Office at (847) 543-2081. In Case of Emergency dial 5555 from any campus phone or dial 0 at the Lakeshore Campus. *Also, 911 can be dialed from any campus phone on the Grayslake and Lakeshore Campuses, and the Southlake Educational Center.*

Grayslake Campus

Crime Prevention

Because many crimes are preventable, CLC's Campus Safety Office encourages students and employees to get involved in protecting themselves and their property and to take responsibility for their own safety and for the safety of others. The following campus safety measures have been put in place to help students and employees protect themselves:

- A twenty-four hour a day campus safety personnel escort service is available by request at the Grayslake campus.
- In-house campus phones located throughout the Grayslake campus provide access to the campus safety dispatcher and the department's enhanced emergency phone system, which immediately traces each on-campus call to provide the location of a caller in need, even if the call is disconnected.
- After-hour access to college facilities is allowed only on an escorted, sign-in basis, by prior arrangement.
- An electronic alarm system monitors a comprehensive campus-wide network of panic alarm and intrusion detection devices.
- Emergency call boxes are located in student parking lots 2 through 5 and staff lots 1 and 7. Push the red button to activate the system.

Other Services

The Campus Safety Office also provides other support services to the college community. These include:

- Parking control, traffic enforcement, and preparation of accident reports
- Assistance to motorists with minor problems such as a dead battery or keys locked inside a vehicle

Lakeshore Campus

Campus Security Precautions

During regular operating hours while classes are in session there is a trained staff on duty, and regular campus safety and security inspections are performed by campus safety personnel. Additionally, a Waukegan police officer is on duty during evening hours when classes are in session. These officers will escort students to their vehicles upon request.

Parking

Parking for student, staff, and visitors is available in the multi-story parking facility located at 30 N. Sheridan Road, just east of the south building. One hundred-fifty spaces, on levels two through four, are reserved for the College's use. Only vehicles displaying a valid College of Lake County permit will be authorized to park in these spaces. Each space is designated as CLC parking only.

Other Services

- Escorts for students to vehicles are available upon request during both day and evening hours.
- Assistance to motorists with minor problems, such as a dead battery or keys locked inside a vehicle, is provided during both day and evening hours, upon request.
- For the convenience of students, staff, and visitors with temporary physical challenges that restrict their ability to walk across campus, an electrically powered wheelchair is available by request at the South building reception desk.

To Report a Crime

Contact the reception desk on the first floor of the South Building and/or the Campus Safety Office near the rear stairs by the parking garage access. Emergency help is available by dialing 0 or extension 6255 from campus phones. The reception desk staff is trained in emergency assistance procedures.

Parking Violation Appeal

Parking lots, signage, and regulations have been developed at the College of Lake County to comply with state laws and local regulations, and to provide for the safety of all persons on campus. The Campus Safety department is empowered to enforce these laws and regulations and to levy fines when they are not followed.

Anyone receiving a citation for a violation of a CLC parking regulation has the right to appeal the citation, for a reasonable cause, with the Campus Safety department. The appeal must be filed within five (5) business days of the date of issue of the citation or else the right to file an appeal is waived.

Appeal Steps

1. Complete and return the appeal form to the Campus Safety Office (A-151) within five (5) business days of the date of the citation.
2. A date and time will be scheduled for an administrative hearing or to discuss the appeal by telephone.

Health Center

The Health Center provides physical assessments of health problems and primary care for illnesses and injuries, making referrals when necessary. Health education programs and screening services are offered in cooperation with other College departments and community agencies. Information on HIV infection and other communicable diseases is available. Required immunizations for health career and transfer students are available by appointment. Confidential care is assured. Medical parking for temporary disabilities is authorized through the Health Center. Low-cost health insurance is offered to all full-time and part-time students and their dependents. Information and brochures are available in the Health Center, Business Office, and Activities Office. The Health Center is located in A149 across the hall from the Campus Safety Office on the Grayslake campus. Hours are Monday through Thursday, 8:00 a.m.-10:00 p.m., Friday 8:00 a.m.-4:30 p.m. Closed Saturday and Sunday. For appointments, call (847) 543-2064.

Intercollegiate Athletics and Intramural Recreation

Intercollegiate athletics and intramural recreation are an important part of student life at the College of Lake County. CLC teams compete in thirteen intercollegiate sports. Women's sports include basketball, cross country, soccer, softball, tennis, and volleyball. Men's sports include baseball, basketball, cross-country, golf, soccer, tennis, and wrestling. CLC is a member of the National Junior College Athletic Association and the Skyway Community College Conference. The College is noted for its excellence and integrity in athletics. Athletic scholarships are available. The CLC intramural and recreational programs provide a variety of activities for students, faculty, and staff. For more information, contact the Office of Athletics and Physical Activities at (847) 543-2046.

Career/Job Search Assistance

The Career Center offers career and job search assistance to all CLC students and alumni as well as to Lake County residents who are seeking full-time, part-time, or seasonal employment. Services include individual and group assistance in areas such as career assessment and exploration, job search techniques, resume writing, and interviewing. If individuals wish to explore these topics at their own pace, they may also utilize the many print, video, and multimedia resources available in the Center.

The Career Center participates in the Collegiate Employment Network, which allows job seekers to search for jobs on the internet. Job seekers may come to the Career Center and register for a user password in order to access the large number of Chicago-area jobs available in the Collegiate Employment Network.

The Career Center sponsors annual job fairs in the spring and summer, and offers on-campus recruiting throughout the year. County, state, and national labor market information is available. Individuals who wish to use any of these services should go to the Career Center in room E101 in person, or call (847) 543-2059.

Policies Governing Student Life

In order to ensure that all students are treated fairly, the College of Lake County has developed policies governing student life.

Student Rights and Responsibilities

Preamble
The Community College District 532, College of Lake County, recognizes that students are both citizens and members of the academic community. As an individual citizen, each student has freedom of speech, assembly, association, and press, and the right of petition and due process as guaranteed by the state and federal constitutions. As members of the academic community, students have the right and the responsibility for participating in the formulation and review of all College regulations and policies directly affecting them.

Upon enrolling in the College, each student assumes an obligation to conduct himself or herself in a manner compatible with the College's function as an educational institution. If this obligation is neglected or ignored by the student, the College must, in the interest of fulfilling its function and meeting its obligations, take appropriate disciplinary action.

A student may be subject to disciplinary action whenever he or she commits or attempts to commit any act of misconduct, whether it be on the College campus, during class, at an activity, function, or event sponsored or supervised by the College, or any time there is a direct relationship between such act and the College. An act of misconduct includes, but is not limited to:

1. Academic dishonesty such as cheating, plagiarism, or knowingly furnishing false information to the College
2. Forgery, alteration, or any other misuse of College documents and records, including identification cards
3. Conduct which interferes significantly with the College's teaching, research, administration, or other responsibilities
4. Conduct that endangers the health, safety, or well-being of members of the College community or visitors to the campus, including but not limited to unauthorized and/or illegal possession, use, or distribution of controlled substances, look-alike drugs, or alcohol, as well as unauthorized or illegal use or possession of firearms or any other weapon
5. Violation of specific rules and regulations of the College disseminated to students including those regarding the college campus parking lots, equipment and facilities
6. Failure to comply with directions of College officials acting within the scope of their duties
7. Any conduct which constitutes a violation of a federal or state law or regulation or local ordinance

Students, as citizens, remain subject to federal, state, and local laws; the College Judicial Board is not intended to replace or modify existing law. The College and its students recognize that violation of these laws may lead to prosecution by outside agencies in addition to disciplinary action by the College.

Sanctions

A. *Reprimand*
A reprimand is an official statement to the student that he or she has been found guilty of misconduct as defined in the preamble of the College of Lake County Student Rights and Responsibilities.

B. *Restitution for Damages*
The student may be directed to pay for damages caused by his or her action. Failure to pay damages could result in additional sanctions being applied.

C. *Behavioral Contract*
A behavioral contract is a contract under which the student agrees to modify his or her behavior. If the student fails to fulfill the terms of the contract, the Vice President for Student Development could suspend the student and/or apply additional sanctions.

D. *Probation*
Disciplinary probation is a warning regarding a student's behavior. The following privileges could be withdrawn:

1. The holding of an office in a campus organization
2. The attending of non-academic activities at the College
3. The representation of the College at any inter-collegiate events

Any subsequent violation of conduct expectations as described in the preamble of the College of Lake County Student Rights and Responsibilities during the probationary period will be evaluated within the context of the student's probationary status. This probation shall be imposed for a specified period and the student shall be automatically removed from probation when the imposed period expires.

E. *Suspension*
Suspension denies a student the right to participate in any academic or other activities of the College or to be on College premises for a specified period of time, not to exceed one semester.

F. *Expulsion*
Expulsion denies a student the right to participate in any academic or other activities of the College or to be on College premises for a period of time of one or more semesters, varying from one semester to four academic school years, with any and all other conditions as determined by the College. Students expelled within a semester or summer term will be administratively withdrawn from classes.

Reinstatement is contingent upon the assessment by College personnel of the individual's written request for reinstatement and a review of the initial violation causing expulsion, as well as upon the individual's agreement to adhere to the behavioral expectations clearly delineated in the preamble of the *College of Lake County Student Rights and Responsibilities*, and his or her acknowledgment of the fact that any violation would result in indefinite expulsion.

Copies of the ***Student Rights and Responsibilities*** policy, including due process procedures, may be obtained either at the Student Activities Office, C101, or at the Vice President for Student Development Office, B108.

Restriction

Students may be restricted (i.e. barred) from adding or dropping courses and/or receiving grade reports and transcripts for the following general reasons:

- **Financial/Materials:** A properly authorized agency of the College may restrict a student who has failed to meet financial obligations or return materials to the College.
- **Judicial:** The Vice President for Student Development may restrict a student who has been suspended or expelled, or contact a student regarding pending judicial or administrative proceeding against the student.
- **Condition of Registration:** The Admissions and Records Office may restrict a student who has not fulfilled a duly established condition of registration.

Notification of Rights under FERPA For Postsecondary Institutions

The Family Educational Rights and Privacy Act (FERPA) gives students certain rights with respect to their education records. They are:

1. The right to inspect and review one's educational records within forty-five days of the day the College of Lake County receives a request for access. Students should submit to the registrar, academic dean, or other appropriate college official, a written request that identifies the record(s) they wish to inspect. The College of Lake County official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College of Lake County official to whom the request was submitted, that official will direct the student to the official to whom the request should be addressed.
2. The right to request the amendment of one's educational records that one believes are inaccurate or misleading. Students must write to the CLC official responsible for the record, clearly identifying the part of the record they want changed, and specifying why it is inaccurate or misleading. If the College of Lake County decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when he or she is notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in a one's educational records, except to the extent that FERPA authorizes disclosure without consent. One case in which disclosure without consent is permitted is that of disclosure to school officials with legitimate educational interests. A school official is a person employed by the College of Lake County in an administrative, supervisory, academic, research, or support staff capacity (including law enforcement personnel and health staff), a person or company with whom the College of Lake County has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees, or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the College of Lake County discloses education records without consent to officials of another school at which a student applies or intends to enroll. *(NOTE: FERPA requires an institution to make a reasonable attempt to notify the student of the records request unless the*

institution states in its annual notification that it intends to forward records on request.)

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the College of Lake County to comply with the requirements of FERPA. The office that administers FERPA is:
   Family Policy Compliance Office
   U.S. Department of Education
   600 Independence Avenue, SW
   Washington, DC 20202-4605

Any information that is NOT a part of directory information must be requested by the student in writing through the Admissions and Records Office.

Student Right-to-Know

In compliance with student right-to-know legislation signed into law on November 8, 1990 and amended by PL 102-26 in 1991, information on completion rates for students at the College of Lake County is available by contacting the Office of Institutional Effectiveness, Planning, and Research, Room B201, at the Grayslake campus, (847) 543-2096.

Addressing Students' Academic Concerns

1. A student should discuss any academic concern and, if possible, resolve the matter with his or her instructor within one calendar year of the initial concern.

2. If the concern is not resolved, the student should meet with the appropriate Academic Dean.

3. The Academic Dean informally reviews the concern and, when appropriate, involves other staff members such as the Vice President for Student Development, counselors, the student's other instructors, the Learning Assistance Center staff, or other Academic Deans.

   The Academic Dean makes personal notes but no formal record.

   The Academic Dean renders a decision, including the rationale for the decision.

4. If a student wishes to appeal the Academic Dean's disposition, a formal process is instituted by the student's completing a statement indicating the concern, the desired outcome, and the rationale. The statement is submitted to the Academic Dean.

   The Academic Dean asks the instructor to write a statement of his or her position, including supporting rationale. The Academic Dean then develops his or her analysis and recommendation and provides the student with his or her written decision.

5. If the student wishes to further appeal, the concern is then submitted to the Vice President for Educational Affairs. The Academic Dean sends his or her statement and the instructor's statement to the Vice President for Educational Affairs who analyzes the situation and develops his or her recommendation.

6. If the matter is not resolved, the President will address the issue, reviewing all materials and, if appropriate, conducting additional personal conferences. If the issue is not resolved, the student has the option to have the President present the concern to the Board of Trustees.

Discrimination and Harassment Complaint Procedures

Discrimination and Harassment Policy

The College, in its commitment to equal rights, will ensure that students may work, learn, and study in an environment that is free of illegal harassment. Harassment infringes upon mutual respect in work and academic relationships and causes serious harm to students in the pursuit of their future careers and success.

In accordance with the statutory provisions included in Title VII of the Civil Rights Act, Title IX of the 1972 Education Amendments, and all other applicable federal and state laws, it is the policy of the College of Lake County not to discriminate on the basis of a person's race, color, religion, sex, national origin, age, marital status, or disability in any of its educational programs, activities, or employment policies.

The College seeks to prevent harassment from occurring. College policies and procedures have been established for the investigation and resolution of complaints. Findings of harassment may result in discipline, including suspension or dismissal.

Prohibited Harassment

The College prohibits harassment and discrimination on the basis of age, disability, national origin, ancestry, race, color, religion, creed, sex, or marital status, or in retaliation for having made a prior discrimination or harassment complaint. Harassment is unwanted behavior directed toward an individual based on one or more of the foregoing designated characteristics.

Discrimination and Harassment Complaint Procedure

Any student who believes that he or she has been discriminated against or harassed may follow either an informal or formal procedure without fear of recrimination. A prompt and confidential investigation will be provided, to the extent possible.

Step 1 - Any student believing he or she has been a victim of discrimination or harassment should discuss their concerns with the Vice President for Student Development. The Dean, or a director, academic dean, or specifically designated person may make an effort to resolve the matter informally.

Step 2 - If the matter cannot be satisfactorily resolved at step 1, the student must file a formal written complaint with the Vice President for Student Development. The mailing address for such complaints is: Vice President for Student Development, College of Lake County, 19351 W. Washington Street, Grayslake, IL 60030-1198.

A written complaint must be filed within sixty (60) days of the alleged incident of discrimination or harassment. In addition, written complaints must be signed, and to the extent possible, should state in detail, the time, place, pertinent facts, and circumstances of the alleged discrimination or harassment along with any witnesses. The Vice President for Student Development will notify the accused of the complaint and will conduct a thorough investigation of the complaint within thirty (30) days of its receipt. The time period may be extended for justifiable reasons or by mutual consent. The complainant and the accused shall be informed of any extensions.

Step 3 - Upon completion of the investigation, the Vice President for Student Development shall make a written statement of finding detailing the final outcome of the investigation. If there is substantial evidence that discrimination or harassment did occur, the Vice President for Student Development may recommend any reasonable and appropriate remedy for the complaining party.

Employees discriminating against students will be subject to discipline under appropriate College of Lake County employment policies and, as applicable, collective bargaining agreements. Depending on the severity of the incident, disciplinary action against an offending employee may include discharge. Students discriminating against other students will be subject to discipline under the Students' Rights and Responsibilities policy. The College may take additional corrective actions to remedy any instances when discrimination is determined to have occurred.

Step 4 - If the complainant is not satisfied with the outcome of the investigation conducted by the Vice President for Student Development, he or she may request in writing that the matter be reviewed by a President's panel. The complainant must make this written request within ten (10) days of the findings in step 3.

The College President shall appoint an impartial panel consisting of:

- One college administrator
- A vice-president
- One faculty member

The complainant shall select one of three possible college administrators offered by the President.

The complainant shall select one of three possible faculty members offered by the President.

The President's panel shall arrange to meet with the complainant as well as other principals associated with the complaint. Following such a meeting (or meetings), the President's panel shall present its findings in writing to the President for final action. The procedures in this step shall be accomplished within thirty (30) working days of the date the written appeal is received by the President. Time limits may be extended by mutual consent.

General Provisions
Because of their sensitive nature, complaints of sexual harassment will be handled with the utmost discretion and confidentiality.

Retaliation against individuals who invoke the procedures set forth herein is strictly prohibited.

Illinois Clean Air Act

The entire main campus is smoke-free except for the designated smoking areas in Lancers Cafeteria and the Building 1 Annex. Lakeshore Campus is smoke-free, except for a designated area in the lower level. Southlake Educational Center is entirely smoke-free.

Services for Students with Disabilities

The College of Lake County provides information, guidance, and support to students with disabilities through a variety of services as well as state-of-the-art adaptive equipment. Services are provided after meeting with a trained staff member from Disabled Student Services. Students must complete a Request for Services Form before accommodations are made. All requests for assistance must be supported by appropriate documentation of disability. Additional information may be obtained from the Disabled Student Services Offices, L115D, L115C, and L112 (847) 543-2474, (847) 543-2458, (847) 543-2473, or (847) 223-0134 (TTY). It is recommended that students needing accommodations should contact Disabled Student Services at least two weeks before classes begin so that necessary accommodations can be made. All information is kept confidential. The programs and facilities at the College of Lake County comply with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Compliance concerns should be indicated to the coordinator and directed to the Assistant Director of Personnel/ Affirmative Action Officer, B146, (847) 543-2216 and/or the Vice President for Student Development, B108, (847) 543-2048.

Student Activities

Student activities provide educational, social, cultural, and recreational opportunities for students, staff, and members of the community. Moreover, involvement in student activities is recognized by many employers as an asset, and they encourage students to develop skills obtainable through participation in campus clubs and organizations.

The Student Activities Office gives students the opportunity to become involved in campus life, to help bring about positive change, and to meet new people and make new friends. The quality of a student's college experience can be related to the level of involvement in various college activities, such as the Student Senate, the Program Board, the student newspaper (*Chronicle*), the radio station WCLC, the literary magazine (*Willow Review*), the Prairie Spirits Dance Theatre, the Child Care Center, the Substance Abuse Prevention Center, and all of the college commissions. There are also more than thirty special interest clubs.

Student life at CLC is further enhanced through co-curricular activities. For those interested in the arts, CLC has a theatre program, a concert band, a jazz ensemble, singing groups, a dance theatre, poetry readings, a performing arts committee, art exhibits, and speakers on a variety of contemporary issues.

The CLC Speech Team competes in individual Public Address and Interpretation of Literature events in state and national tournaments.

Student organizations can serve as a laboratory where a student can spend as much time as desired planning, organizing, and implementing programs and services for students and the community. For additional student involvement opportunities, stop by the Student Activities office, room C101, or call (847) 543-2055.

Student Government
Students may affect College-wide policies, procedures, or actions concerning student life by directing their concerns to or by participating in the Student Senate and College-wide governing commissions.

Contact the Vice President of Student Development, B108, (847) 543-2048, or the Director of Student Activities, C101, (847) 543-2288 for assistance in sorting out options and identifying chairpersons.

Student Body Profile

The College of Lake County student body reflects the diversity of the Lake County community. Over 15,000 students attended the college in the fall of 2000. These students represent a wide range of age groups, racial and ethnic backgrounds.

In 2000, 19% of students graduating from Lake County public high schools in the spring enrolled at the College of Lake County in the fall. Students in the eighteen to twenty-four year age group make up forty-one percent of the student body. Students aged twenty-five to thirty-four comprise the second largest segment or twenty-four percent of the total. The average age of the student body is thirty-one. Minorities comprise 31% of the student body. Hispanic students account for the largest single minority group (18%). An additional 5% of the student body is foreign students studying in the United States on visas.

The College offers programs and schedules which provide a great deal of flexibility for students. The majority of students (78%) attend part-time. Evening students outnumber day students 54% to 40%. Six percent of students attend classes primarily on the weekends. College studies indicate that students who continue their education after graduating from CLC are well prepared for their classes. In fact, when CLC students transfer to a four-year school, they do as well or better than their fellow students. Among the students who enter the labor market after completing an AAS degree or certificate program, 81% percent find work in fields related to their area of study, and 88% report they are satisfied with their jobs.

Servicemembers Opportunity College

The College of Lake County has been designated a Servicemembers Opportunity College (SOC) by the Department of Defense and the American Association of Community and Junior Colleges. Servicemembers Opportunity College Associate Degree (SOCAD) student agreements are available in many different curriculums offered at the College. CLC is committed to Great Lakes Naval Base personnel and their families. The College's in-district admission policies apply to all service personnel as well as to their families. For more information on applying for a SOC agreement, contact the Veterans Representative at (847) 543-2063.

Academic Information & Regulations

Academic Assistance

The Learning Assistance Center provides academic support to CLC students with individual needs through testing, modular instruction and tutoring. These services are available at both the Grayslake and Lakeshore campuses.

Testing Center
The Testing Center is a centralized testing service where students can complete the GED, ACT, CLEP, DANTES, Academic Proficiency Test (APT), telecourse testing, make-up testing, correspondence testing, and nursing checks as well as career and interest inventories. For more information, call (847) 543-2076 for the Grayslake campus, or call (847) 543-2120 or (847) 543-2186 for the Lakeshore Campus.

Modular Instruction
Students wishing to improve their vocabulary, basic writing or mathematics skills can do so by enrolling in a module. These individualized, structured programs of study permit students to work at their own pace. Modules are available at the Grayslake Campus and at the Lakeshore Campus.

ENG 102	Spelling
ENG 103	Vocabulary
ENG 104	Sentence Structure & Punctuation
MTH 101	Elementary Concepts of Math

Tutoring
Free tutoring, either one-on-one or in a group setting, is available at the LAC to College students who need additional help with their courses. Appointments may be scheduled with qualified tutors in most subject areas. Drop-in tutoring is available in writing, mathematics, and chemistry. For more information, call (847) 543-2076.

Students with Disabilities
Disabled Student Services provides accommodations for students with disabilities. Adaptive equipment such as adjustable desks, tape recorders, a voice-activated computer, a kurzweil reading machine, and a three-wheel scooter are available. Note-takers, readers, testing accommodations, tutors, and interpreters are also provided. Students requesting accommodations must complete a Request for Services Form before accommodations are made. All requests for assistance require appropriate documentation of disability. For more information, call (847) 543-2474, (847) 543-2458, (847) 543-2473 or (847) 223-0134 (TTY).

Academic Computing

The academic computing facilities at CLC include a wide variety of labs and equipment designed to meet the needs of the student population. Many divisions within the College maintain independent lab facilities specifically suited to the issues encountered in each academic discipline. In addition, there are a number of labs located at the both the Grayslake and Lakeshore campuses that are available for use by the general student population. In addition to the various software resources provided by the academic divisions, students also have access to the internet in many of the labs. The number of labs in each division is as follows:

- Biological and Health Sciences - 4
- Business - 7
- Continuing Education/Economic Development - 2
- Communication Arts - 4
- Engineering, Math, and Physical Sciences - 3
- Learning Resource Center - 4
- Lakeshore Campus - 4

Aside from these labs, there are a number of individual instructional support workstations located in many areas throughout the College. Such diverse disciplines as Health Information Technology, Biology, Medical Lab Technology, Chemistry, Physics, Refrigeration and Air Conditioning, Numerical Control, and Automotive Maintenance, use these facilities to provide enhanced instruction to CLC students.

The College's computing facilities are heavily used both for class sessions and by individuals for instruction, homework, or personal computing needs. These computing facilities encompass a wide range of leading-edge hardware and operating systems, including PC, Macintosh, and UNIX. Instructors will assist students in determining hardware and software requirements for their particular course.

All academic computing facilities are operated under a set of guidelines that are designed to improve the students' working environment while maintaining the integrity of the entire computing system. For specific information regarding equipment location and use, call the Educational Technology Department at (847) 543-2074.

Academic Honors

Semester Honors

Semester honors are compiled and published at the end of the fall and spring semesters. Students who have earned a grade point average of 3.0 (B) or higher while enrolled in at least 12 semester hours of transfer or career courses during a semester are recognized by placement on the **College Honor List** for that semester.

Students who have earned a grade point average of 3.0 (B) or higher while enrolled in 6 to 11.50 semester hours of transfer or career courses during a semester are designated as **Special Commendation Recipients.**

Commencement Honors

A student who has earned at least 30 semester hours at CLC by the end of the fall semester immediately preceding the commencement ceremony will be recognized as receiving the following honors based upon cumulative **G.P.A.:**

Honors .....3.00 - 3.49 High Honors.....3.50 - 3.74

Highest Honors.....3.75 - 4.0

Academic Standards

To help guide and measure students' academic success, the College has developed Academic Standards. Note: The Academic Standards policy is currently under review. Students will be notified of any changes.

Satisfactory Academic Progress

Satisfactory academic progress is measured by two standards: the ***Course Completion Standard*** and the ***Grade Point Average Standard***. Students must meet these standards to be in good standing. (Excluded from these standards are courses in Adult Basic Education (ABE), Adult Developmental Education (ADE), English as a Second Language (ESL), General Education Development (GED), Vocational Skills Technology, Contract Training, Continuing Education, and General Studies.

Course Completion Standard

The Course Completion Standard calculation includes baccalaureate/transfer courses, career courses, and remedial courses. The following table shows the minimum number of courses that a students must complete to remain in good standing.

Courses Attempted	Minimum Courses To Be Completed
2	1
3 or 4	2
5 or 6	3
7 or 8	4
9 or more	5

NOTE: Calculation of courses attempted for sixteen-week courses is computed after the end of the fourth week for each credit course in which s students is enrolled. A comparable ratio applies for courses of other lengths.

Grade Point Average Standard

The grade point average calculation includes only baccalaureate/transfer courses and career courses; remedial courses are not included. Students who have attempted 15 or more semester hours at CLC must maintain the minimum grade point average listed below to remain in good standing:

Hours Attempted	GPA
15-44	2.0 either cumulatively or for the semester
45 or more	2.0 cumulative

Students In Good Standing

Students who meet the Course Completion Standard and the Grade Point Average Standard are designated to be in good standing.

Students Not In "Good Standing"

Students are not in good standing if, due to their academic record, they are placed in one of the following categories:

Academic Caution

Students previously in good standing who do not meet either the Course Completion Standard or the Grade Point Average Standard will be placed on academic caution.

Students on caution are recommended to limit their enrollment to the number of semester hours successfully completed during the previous term, or to only one course for credit, depending on whichever option yields the most semester hours.

Academic Restriction

Students on academic caution who do not meet the Course Completion Standard and/or Grade Point Average Standard will be placed on academic restriction. Students placed on academic restriction are notified that, in their next term at the College, they may only enroll in the number of semester hours successfully completed during the previous term, or they may enroll in only one course for credit, depending on whichever option yields the most semester hours.

Students on academic restriction are required to meet with an advisor and may not register for courses until they have done so.

A student's financial aid is discontinued when he or she is initially placed on academic restriction.

Academic Suspension

1. Students who fail to meet the Grade Point Average Standard for two successive semesters are prohibited from taking courses the following fall or spring semester (summer excluded), except for Adult Education, Continuing Education, and Business and Industry Center courses.
2. Students have the right to appeal their suspension to the Academic Standards Appeals Board.

Students Who Return From Academic Suspension

Students who have completed a one semester suspension are limited in the initial semester of their return to enrolling for no more than 13 semester hours.

Students Who Were Academically Suspended, Who Have Returned To CLC, and Who Again Are Placed On Academic Restriction

1. These students are suspended for the following fall or spring semesters (summer term excluded).
2. To enroll again students must petition and receive approval from the Vice President for Student Development.

Academic Standards Appeal Procedure

1. Purpose

Students who have been suspended for not meeting the academic grade point average requirement may appeal their suspension to the Academic Standards Appeals Board.

2. Role of the Appeal Board

The Appeals Board reviews requests for re-enrollment on a case by case basis. The Board may determine whether a meeting with a student submitting an appeal is warranted. The Board is composed of an administrator, a representative from the faculty senate, and a representative from the student senate.

3. Grounds for Appeal

Students who choose to appeal their suspension must submit documentation to support the extenuating circumstances which resulted in failure to meet the grade point average requirement under Academic Standards Policy.

Extenuating circumstances may include but are not limited to the following areas:

- Death in family
- Prolonged hospitalization or serious illness
- Significant change in lifestyle made to adjust to the demands of attending college (i.e., cut down from two jobs to one)
- Personal crisis (i.e., divorce, illness of family members, etc.)
- Other extenuating circumstances

4. Appeal Procedures

a. Within five (5) working days of the receipt of a suspension notification letter, the student must obtain a copy of the appeal procedures from the Counseling Center and schedule an appointment with a counselor.
b. Within five (5) working days, the student must complete an Academic Suspension Appeal Form and return it to the Counseling Center or Lakeshore Student Services Center.
c. The Counseling Center will forward the student's appeal forms to the Vice President for Student Development Office to schedule an appeal review. An Appeal Board hearing will be scheduled within five (5) working days of the receipt of the appeal form. The students may be asked to meet with the Appeals Board if the Board deems it necessary.
d. The decision of the Appeal Board may be appealed to the Vice President for Student Development within five (5) working days of the Board's decision. The Vice President for Student Development will review the request for appeal, meet with the appropriate parties, and render a final decision regarding the appeal.

Reinstatement of Good Standing

Students placed on academic caution, restriction, or suspension, who satisfy both the Course Completion Standard and Grade Point Average Standards during their next semester or summer term at CLC will be considered to be in good standing.

Inactive Status

Students who have not enrolled in any course listed in the CLC class schedule for at least two years will be designated as inactive.

Inactive students who decide to re-enroll for courses will be governed by the college catalog covering the semester in which they register for courses.

Forgiveness Option

Under extenuating circumstances, students may petition for a **one-time** forgiveness of up to 15 hours of prior D or F grades in accordance with the following guidelines:

- At least two years have passed since the end of the term of the grades to be forgiven.
- Fifteen consecutive semester hours have been completed with no grades lower than a C.
- Forgiven grades remain on the student's record but are not computed in the student's grade point average.
- Forgiven grades cannot be used to meet graduation requirements.
- Students lose any existing educational guarantees for the forgiven courses.
- The college accepts no responsibility for the ways in which a transfer college or university or an employer might interpret a student's use of the forgiveness option.
- In consultation with a counselor, the student has signed a declaration of understanding.

This policy is not intended for use by graduates.

Auditing

Students are permitted to audit courses. For audited courses, students receive a grade of X which carries no grade points or semester hours of credit. Audited courses do not serve as prerequisites for subsequent coursework. The fee for auditing is the same as that for enrolling for credit.

A student who wishes to audit a course is expected to attend regularly. The completion of assignments, exams, and projects is at the discretion of the student. Some types of courses may be deemed inappropriate for auditing because they require a high level of student involvement.

Students can register by contacting the Office of Admissions during office hours. Registration during off hours can be done through the automated registration system; however, the student must then contact the Office of Admissions during regular office hours to change their enrollment status to audit. Changes in a student's enrollment status (audit to credit or credit to audit) must follow the time frames as listed for refunds in the Tuition and Fee Payment and Refund Schedule (Policy 421). For example, in a course of twelve or more weeks, a student may not change enrollment status after the fourteenth calendar day from the first meeting of the course. See page 23 of this catalog for more information.

Credit-by-Exam

The College of Lake County provides opportunities to earn credit for prior learning experiences through the taking of exams. A student may opt for credit-by-exam for a number of reasons, including his or her own information or college credit, or for an employer, a certifying agent, or a professional licensing agency. **A student should check the transfer school to determine its policy toward credit-by-exam.**

The CLC Board policy states that Credit-By-Exam is:
- Not to exceed a total of 30 semester hours required toward completion of an associate degree.
- Not to exceed one-half of the semester hours required toward completion of a certificate.
- Not to count towards the fulfillment of the 15 semester hours general residency requirement for the associate degree.

There are four types of credit-by-exams available to students enrolled at CLC: Advanced Placement (AP), College Level Examination Program (CLEP), DANTES, and Challenge Exams. For some courses there may be more than one type of exam available for receiving credit. For information about specific credit, passing scores, and examination requirements, consult with one of the following offices:
- Counseling Center, Room C11O, (847) 543-2060.
- Learning Assistance Center, Testing Center, first floor of LRC, (847) 543-2076.
- Biological/Health Sciences Division, Room C140, (847) 543-2042.
- Business Division, Room A143, (847) 543-2041.
- Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040.
- Engineering, Mathematics/Physical Science Division, Room B162, (847) 543-2044.
- Social Science Division, Room A244, (847) 543-2047.
- Cooperative Education office, Illinois Employment and Training Center (IETC) Room E101, (847) 543-2058.

Students who plan to receive credit-by-exam scores through AP, CLEP, and/or DANTES must ask the Educational Testing Service (ETS) to send an official transcript of their scores to the Admissions and Records Office at the College of Lake County.

The earning of credits-by-exam has no effect on a student's grade point average.

Advanced Placement (AP)

The College of Lake County recognizes AP test scores for the purposes of placement into advanced level courses and/or for college credit. High school students can arrange for AP tests, administered by the College Entrance Examination Board, through their local high schools. AP test scores determine specific placement and/or college credit.

College Level Examination Program (CLEP)

CLEP is a national program sponsored by the College Level Examination Board. Each individual college determines which CLEP tests it will accept for credit and the amount of credit it will award.

The CLEP examinations cover material taught in five basic areas: English composition and literature, science and mathematics, social sciences and history, foreign languages, and business.

The College of Lake County grants CLEP credit only to students enrolled at CLC. Results of CLEP exams may also be sent to another school at which a student is enrolled for the purposes of credit recognition.

CLEP tests are offered once a month, except in December, through the Testing Center. CLEP tests are usually offered on the third Tuesday of each month. The fee is $58 per test (subject to change). An additional $5 is charged if an examinee changes a testing appointment. Call (847) 543-2076 for information.

DANTES Subject Standardized Tests

The DANTES Program includes tests in over 50 subjects. The series of tests assess learning in traditional academic, vocational/technical and business subjects. While DANTES tests have been used by United States military personnel since World War II, they are now available to civilian students seeking introductory college level credit for education acquired in nontraditional environments. The DANTES testing program is offered through the Educational Testing Service (ETS). A list of DANTES tests is located in the Counseling Center, the Learning Assistance Center, and the division offices. DANTES tests are usually offered on the second Tuesday evening of the month through the Testing Center, first floor of LRC, 543-2076. The fee is $58 per test with an additional $5 charge if an examinee changes the testing date. Fees are subject to change.

Credit for High School Vocational Courses

This articulation program provides students who have completed high school vocational programs the opportunity to receive college credit. The curriculum in the secondary program has been compared to introductory courses in some of the career programs. Articulation agreements are for students who have completed various programs taught at Lake County High School Technology Campus and several high schools in Lake County. Copies of the specific program agreements are on file in the Assistant Vice President of Educational Affairs office, C216, (847) 543-2422.

Challenge Exams (CH)

With the recommendation of an appropriate instructional staff member, students may "challenge" a course at CLC to demonstrate knowledge in a particular subject area. Credit will not be awarded by CLC for examinations unless the student is or has been enrolled in credit course work at the college or has been accepted into a certificate or degree program. The fee for each challenge exam is $8 per credit hour with a minimum fee of $24 per course. Students interested in the challenge examination process should consult the appropriate division office listed below:

- Biological/Health Sciences Division, Room C140, 543-2042
- Business Division, Room A143, 543-2041
- Communication Arts, Humanities & Fine Arts Division, Room B237, 543-2040
- Engineering, Mathematics & Physical Sciences Division, Room B162, 543-2044
- Social Science Division, Room A244, 543-2047
- Cooperative Education, Illinois Employment and Training Center (IETC), Room E101, 543-2058

Course Load

The normal course load for a full-time student is from 12 to 18 semester hours during the fall and spring semesters and from 6 to 9 semester hours during the summer session. Special permission must be obtained for more than 18 semester hours during the fall and spring semesters or for more than 9 semester hours during the summer session.

An employed student should vary his or her course load according to the number of hours he or she works. A good rule of thumb is to plan for three hours per week for each semester credit hour taken, one hour for the formal class meeting and two hours for outside study and homework.

The number of semester hours that a student may take is limited for those on academic restriction.

College Graduate Guarantees

To assure the quality of its transfer and career degree programs, the college guarantees successful transfer of courses for graduates of the Associate in Arts and Associate in Science degree programs. It also guarantees job competencies for graduates of the Associate in Applied Science programs according to procedures published annually in the college catalog.

Guarantee of Transfer Credit

The College of Lake County guarantees to its Associate in Arts, Associate in Science, Associate in Engineering Science, and Associate in Fine Arts graduates the ability to transfer course credits to Illinois public colleges and universities which have articulation agreements with the College of Lake County.

The guarantee of transfer credit is limited by the following conditions:

1. The student must complete the AA, AS, AES, or AFA degree at the College of Lake County within three years of his or her initial enrollment at the College of Lake County.
2. This guarantee applies only to courses taken at the College of Lake County.
3. The student must have earned a grade of C or better in the course in question.
4. The guarantee applies only to courses included in a written transfer/articulation plan which must be on file with the Transfer Coordinator.
5. A request for additional course work must be received by the College of Lake County no later that two years after the student has graduated.
6. The student must invoke the terms of the guarantee of transfer within 60 days of any notification that the course credit has been declined or refused by the transfer institution. Requests should be directed to the Assistant Vice President for Educational Affairs and must contain documentation that one or more of the courses included in the written transfer/articulation plan did not transfer. The request must specify the name, position, address, and telephone number of the person or office denying the transfer of credit, the date that the denial was received, and the reasons, if any, for the denial.
7. CLC is not responsible for books, additional course fees, tools, activity fees, or any other course-related expenses.

Guarantee for Job Competency

College of Lake County makes certain guarantees to students who earn an Associate in Applied Science Degree or a Career Certificate. A graduate who has been judged by his or her employer to be lacking in the technical job skills that have been identified as exit competencies for the specific degree or certificate program that the student completed will be provided with up to 15 tuition-free credit hours of additional and appropriate skill training by CLC under the following conditions:

1. The individual must have earned the AAS degree or guaranteed certificate after May 1994 in a career program identified in the CLC catalog.
2. The individual must have completed all the skill-based courses at CLC within a four year period.
3. The individual must be employed full-time in an area directly related to the area of his or her program concentration as certified by the Assistant Vice President for Educational Affairs.
4. Employment must commence within 12 months of graduation.
5. The employer must certify in writing that the employee is lacking entry-level skills identified by CLC as the employee's program competencies and must do so within 90 days of the individual's initial employment.
6. The individual, with the employer, the appropriate associate dean, and a counselor, will develop a written education plan that will fulfill the student's skills requirements.
7. Retraining will be limited to 15 credit hours in courses that directly provide the skills required to attain competency on the job. These classes will be regularly scheduled CLC classes. All retraining must be completed within one year.
8. CLC is not responsible for books, additional course fees, tools, activity fees, or any other course-related expenses.
9. The completion of the additional course work does not guarantee that the graduate will achieve the required competencies or that the individual will pass any licensing or qualifying examination for a particular career.
10. The sole remedy given to an individual by CLC and its employees for skill deficiencies shall be the 15 tuition-free credit hours provided under the conditions described above.
11. The individual must complete the formal application for the tuition-free credit hours by contacting the Assistant Vice President for Educational Affairs.

Final Examination

A final examination is generally required in all courses. Examinations will be administered at regularly scheduled times in accordance with an officially published examination schedule.

Except under emergency circumstances, a student may not be excused from these examinations. If a student is unable to appear, it is his or her responsibility to inform the instructor prior to the scheduled examination.

Grades and Grade Points

Final letter grades are earned for each class, issued at the end of each semester, and recorded on the student's permanent academic record according to the following schedule:

Grade			Significance
Calculated in Grade Point Average	A	Excellent	4 Grade Points
	B	Good	3 Grade Points
	C	Average	2 Grade Points
	D	Below Average	1 Grade Point
	F	Failure	0 Grade Points
Not Calculated in Grade Point Average	I	Incomplete	
	N	Requirements Not Fulfilled	
	NR	No Grade Received	
	P	Satisfactory	
	R	Repeated	
	W	Withdrew	
	X	Audit	

The P and N are used to grade non-credit Continuing Education courses, English modules, and Academic ESL Classes. Adult Education, Continuing Education, and Basic Skills courses are not computed in a student's grade point average. Colleges and universities to which a student transfers will recalculate the grade point average to meet their standards.

Incompletes

A student who finds it impossible to complete the work by the end of the semester or session because of a justifiable reason such as illness may be able to take an incomplete (I) for the course. Incompletes shall be given at the discretion of the instructor. The student, the instructor, and the academic dean shall sign a verification form which will include a justifiable reason for assigning the incomplete and will provide for a final grade to be recorded within the first 120 days of the following semester. The final grade shall be A, B, C, D, or F. An I becomes an F at the end of the one hundred-twenty day period if no grade change is signed by the instructor. Exceptions may be granted by an instructor only in unusual circumstances and with the approval of the appropriate academic dean. Under such circumstances students should contact the appropriate division office.

Independent Study

Students may pursue courses offered by the College on an independent study basis under the following conditions:

1. Lack of enrollment in a course appropriate for the student's program of study precludes its being offered as a regularly scheduled class.

2. Documented, extenuating personal circumstances preclude an individual's enrollment in a scheduled class appropriate for his or her program of study.

Approval is granted upon the concurrence of a faculty member who agrees to guide the independent study and upon the authorization of the divisional associate dean.

Physical Education Credit

Any student who is eligible for the G.I. Bill or who has had two years of active duty in the armed services may be given two semester hours of credit for physical education.

Repeating a Course/ Re-Enrolling in a Course

Students may repeat courses that are identified in the course description as being repeatable. Repeatable courses are those that teach a skill that may be improved through continued practice or those whose subject matter changes from semester to semester. The number of times these courses may be repeated is identified in the course description.

Student may also re-enroll in a course in an attempt to improve their grade or for other reasons. When a student re-enrolls in a course, the highest grade earned, or the most recent grade if all the grades are the same, should be the only grade computed in the student's grade point average. Grades that are not computed in a student's grade point average based on the repeat rules will be noted on the transcript

Transfer of Credit

A student who has previously attended another college and who intends to earn a degree or certificate from the College of Lake County must have an official transcript from each college sent directly to the Admission Office.

Transfer evaluations are based on the student's program of study at the College of Lake County. Credit will be granted for acceptable work completed at other approved colleges and universities for courses in which a student has earned a grade of C or better. Credit will also be awarded for courses in which a D has been earned provided a student's over-all average is C or better for the credits transferred. Transfer credits accepted from other collegiate institutions will be entered on the student's permanent record at the College of Lake County, but the grades earned in these courses will not be used to compute the student's cumulative grade point average.

Use of Information Technology

In pursuit of its teaching and learning mission, the College provides access to Information Technology (IT) facilities and resources for students, faculty, staff, and other authorized users according to institutional priorities and financial capabilities.

This access is a privilege granted by the College and is governed by such factors as relevant laws and contractual obligations, the nature and need of the information sought by the user, and the risk of damage or loss to the College. Special training and the signing of a statement of responsibility may be required before access to IT facilities is allowed.

The College reserves the right to limit, restrict, extend, or deny computing privileges and access to its IT resources. The college may allow individuals other than college students, faculty, or staff members access to information so long as such access does not violate any license or contractual agreement, college policy, or any federal, state, county, or local law or ordinance.

Information Technology provides important means of communication, both public and private. Authorized users and system administrators will respect the privacy of person-to-person communications in all forms, including voice (telephone), text (electronic mail, file transfer, fax), and image (graphics, television, video conferencing, and satellite systems). The College reserves the right to monitor and record the usage of all Information Technology facilities and resources.

All members of the College community who use IT facilities and resources must act responsibly in their use of the resources. All users of the College's IT facilities and resources must respect the rights of other users, respect the integrity of the physical facilities, comply with all pertinent licenses, contractual agreements, and operating procedures, and uphold the highest standard of ethics. Information Technology shall only be used for the purposes of teaching and learning, administration, economic development, or research.

Unacceptable Use of Information Technology

1. It is not acceptable to use the College's equipment or facilities for any purposes which violate U.S. or state laws.

2. It is not acceptable to use the College's facilities in such a way as to interfere with or disrupt network users, services or equipment. Such interference or disruption includes, but is not limited to, the following: conducting profit-making activities or distributing unsolicited advertising unrelated to the College of Lake County, transmitting threatening, obscene, or harassing materials or otherwise unwelcome e-mail, propagating computer viruses, playing computer games, doing intentional damage or otherwise interfering with other individuals' use of the internet, computer files, or programs, copying College owned software for personal use, or using the network to make unauthorized entry to other computing, information, or communications devices or resources.

Enforcement

Intentional or negligent corruption or misuse of IT facilities and resources is a direct violation of the College's standards for conduct. Alleged violations of this policy will be processed in accordance with the processes outlined in the College's Policy Manual, collective bargaining agreements, and the statement of Student Rights and Responsibilities. Access and use violations of Information Technology facilities and resources will be treated seriously. The College will pursue criminal and civil prosecution of violators as it deems necessary.

Programs of Instruction & Graduation Requirements

Associate Transfer Programs

CLC's associate transfer programs allows students to transfer to schools throughout Illinois and across the United States.

In general, reports from state universities indicate that CLC transfer students generally perform as well as, or better than, students who begin their studies at four-year schools. Moreover, a five-year longitudinal study of students transferring from two-year colleges to four-year colleges and universities in Illinois revealed that students who transferred with an Associate in Arts or Associate in Science degree earn higher grade point averages and have higher completion rates than students who transfer without a degree. Almost seventy percent of the AA/AS degree students had graduated or were still enrolled at the end of the study with an average GPA of 2.81. Only fifty-two percent of those who transferred without a degree had graduated or were still enrolled with an average GPA of 2.58. The Illinois Community College Board released the study in 1986.

The College of Lake County successfully prepares students for higher level courses. Students enjoy their programs at CLC and successfully transfer their credits to four-year schools. This is especially true for students who earn an Associate Transfer Degree. CLC provides the Associate in Arts, the Associate in Science, the Associate in Engineering Science, and the Associate in Fine Arts degrees to individuals interested in pursuing a baccalaureate degree at a senior college or university. The degree the student chooses to pursue should be based on the student's proposed major at the transfer institution. To ensure full transferability of coursework, students should work with an advisor who will assist with verifying degree requirements for the specific senior college or university of the student's choice.

The Illinois Articulation Initiative — IAI

What is the "IAI"?

The Illinois Articulation Initiative (IAI) is a program to ease the transfer for students from 2-year or 4-year colleges/universities to 4-year colleges/universities in Illinois. This initiative is limited to students who are first-time college students since May 1998.

How does IAI work?

As part of each CLC transfer degree program, students are required to take "general education" courses in the following areas: Communications, Mathematics, Humanities/Fine Arts, Physical/Life Sciences and Social/Behavioral Sciences. For the IAI students will take a core of 37-41 credit hours selected from designated courses at CLC covering the five general education areas. After completing the required 37-41 credit hours, students will have completed the IAI General Education Core Curriculum (IAI GECC). Some CLC courses share an IAI number. ***Please note:*** When selecting courses for the IAI core, students must be sure that the IAI number (printed in bold) is only used ONE time.

Below is a list of CLC courses that share an IAI number. Each of the following IAI numbers may only be used once.

- **F2 900**: ART 121; HUM 125
- **F2 902**: ART 241; ART 242
- **F2 905:** HUM 123, HUM 222
- **H1 900:** ARA 222; CHI 222; FRN 222, 223, 224; GER 222, 223, 224; ITL 222, 223, 224; JPN 222; RUS 222; SPA 222, 223, 224
- **H3 911D:** ENG 129, ENG 247
- **H4 906:** HUM 127; PHI 122
- **M1 900:** MTH 145, MTH 146, MTH 224, MTH 246
- **P1 902L:** CHM 120, CHM 121
- **P1 905:** GEO 120, GEO 124
- **S4 900N:** GEG 122, GEG 123

IAI approved courses are subject to change. You may verify by one of the following: www.iTransfer.org, see your major advisor or see a counselor.

How does the IAI General Education Core Curriculum (GECC) fit an Associate degree?

For students who are working on an AA or AS degree at CLC, the GECC will meet general education requirements. Students will need to complete the remaining 17 or 23 hours of general electives - the academic courses for the designated/intended major.

Why should students complete the IAI General Education Core Curriculum?

With the IAI GECC completed, students may transfer the core (with or without an AA/AS degree) to any participating Illinois college/university. General education requirements will be considered met.

Won't general education courses transfer anyway?

Most CLC courses will meet the requirements at the four-year college or university, however, many of the colleges and universities evaluate your transcripts on a course-by-course basis, and some courses may not count towards the transfer school program. With the GECC, students meet the general education core at participating schools.

How can transfer students meet junior status?

To achieve junior status at a four-year college or university, transfer students need 60 transferable hours. Those students completing the IAI GECC and the CLC AA or AS will be juniors. If students choose to transfer with the 37-41 hour GECC completed, they will be ready to focus on the academic major courses at the transfer college or university.

What should students do when they have completed the GECC?

Once the General Education Core Curriculum (GECC) is completed, students must request CLC Admissions to do an audit of the GECC. The credit evaluators will review transcripts to verify that all necessary courses have been taken and will then indicate on your transcript that the IAI GECC is complete.

A few additional notes:

- Talk with an advisor or counselor about the IAI and how it can work for you.
- A list of participating colleges and universities is posted outside of the Counseling Office (C-110 at Grayslake and L-205 at Lakeshore). The list is not published in the CLC catalog because it is subject to change. To plan CLC courses to fit the IAI, go to the IAI website at www.itransfer.org, select "Gen. Ed" on the homepage, then select the link for the "Student Planning Worksheet."

The IAI covers courses in certain majors; some elective courses may also be designated as IAI Major courses. To learn more:

- contact the advisor for a specific major
- contact a counselor
- visit the IAI website and link to Majors

Transfer Courses of Study

For those students who have decided upon a major which they will pursue at the senior institution, courses of study relating to a variety of Baccalaureate majors can be found beginning on page 64. These listings are provided as a guide for students.

Career Programs

The College of Lake County offers the Associate in Applied Science degree and career certificates for students desiring to pursue employment in a specialized field. Obtaining this degree or certificate depends on the successful completion of requirements for a specific career program. College of Lake County career programs and their requirements are listed on pages 88-136.

CLC Career Programs

Business Operations
- Accounting
- Administrative Office Systems
- Computer Information Systems
- Food Service-Culinary Arts
- Food Service-Food Service Management
- Information Processing Specialist
- Microcomputers for Business
- Professional Cook
- Web Programming

Business, Sales, and Management
- Business Management, Supervision
- Business Management, Marketing

Creative Communications
- Internet Communications
- Multimedia Communications
- Multimedia Presentations
- Professional Technical Communication
- Technical Communication
- Web Development

Health Sciences
- Certified Nurse Assisting
- Dental Hygiene
- Health Information Technology
- Medical Billing Specialist
- Medical Imaging (Radiography)
- Medical Laboratory Technology
- Medical Transcription
- Nursing (Registered)
- Phlebotomy Technician

Natural Sciences
- Chemical Technology
- Horticulture
- Water-Wastewater

Social and Personal Services
- Criminal Justice
- Early Childhood Education
- Human Services Program - Adult
- Human Services Program - Exceptional Child
- Human Services Program - Alcohol, Substance Abuse and Addictive Disorders
- Library Technical Assistant

Trades, Crafts, and Industries
- Automotive Collision Repair
- Automotive Technology
- Basic Machining
- Building Construction Technology
- Computerized Numerical Control Programming
- Electrical/Electronic Maintenance
- Electrician Apprenticeship
- Industrial Maintenance and Repair
- Machine Tool Trades
- PC Technician
- Refrigeration and Air Conditioning
- Tool and Mold Maker
- Welding

Technologies
- Architectural Technology
- CAD-Drafting Technology
- Civil Technology
- Cisco Networking
- Drafting
- Electronics Engineering Technology
- Fire Science Technology
- Mechanical Engineering Technology

Joint Agreement Programs

Students interested in joint agreement programs should contact the CLC Office of the Assistant Vice President, Educational Affairs, (847) 543-2422, for program information and authorization to register at the appropriate school.

Classes in these programs are held at the sponsoring institution, not at CLC.

Elgin Community College **(847) 697-1000**
Elgin, Illinois
- Dental Assisting
- Thermoplastics Injection Molding
- Truck Driving

Gateway Technical College **(262) 564-2200**
Kenosha, Racine and Elkhorn, Wisconsin
- Aeronautics-Pilot Training
- Air Frame and Power Plant Mechanic
- Automated Manufacturing Systems
- Barber/Cosmetologist
- Computer Information Systems - Microcomputer Specialist
- Court and Conference Reporting
- Dental Assistant
- Electromechanical Technology
- Fluid Power Maintenance
- Fluid Power Technology
- Graphic Technologies-Designer
- Health Unit Coordinator
- Hotel/Hospitality Management
- Interior Design
- International Trade
- Interpreter Training
- Legal Secretary
- Materials Management
- Medical Assistant
- Physical Therapist Assistant
- Plastics Manufacturing
- Practical Nursing
- Radio Broadcasting Technician
- Surgical Technician

William Rainey Harper College **(847) 925-6000**
Palatine, Illinois
- Bread and Pastry Arts
- Building Codes and Enforcement
- Cardiac Technology
- Certified Professional Secretary
- Dietetic Technician
- Fashion Design
- Fashion Merchandising
- Financial Institute Management
- Financial Management
- Financial Services - Commercial Credit Management
- Financial Services - Finance Specialty
- Financial Services - Real Estate (AAS)
- Financial Services - Real Estate Brokers License Preparation
- Industrial and Retail Security
- Interior Design
- Journalism
- Law Office Administrative Assistant
- Materials/Logistics Management
- Medical Office Assistant
- Paralegal Studies
- Pharmacy Technician
- Operating Room Nurse Course - LLH 067
- Sign Language Interpreting
- *Courses offered via interactive TV*

McHenry County College **(815) 455-3700**
Crystal Lake, Illinois
- Developmental Disability Aide
- Dispensing Opticianry
- Early Childhood Education 12 Hour Certificate
- Entrepreneurship
- Firefighter II Certificate
- Fitness Instructor Technology
- Manufacturing Mangement
- Manufacturing Supervision
- Real Estate
- Real Estate Appraisal

Oakton Community College **(847) 635-1600**
Des Plaines, Illinois
- Advanced LAN Management
- Certified Professional Secretary
- Desktop Design
- Financial Services
- Hotel Management
- Hotel Management - Bed and Breakfast Operations
- LAN Management
- Materials Management
- Physical Therapist Assistant
- Real Estate
- Real Estate Appraisal
- *Courses offered via interactive TV*

Residents of other communities

The following programs are available at CLC for in-district tuition rates to the residents of specified Illinois community college districts upon presentation of a Joint Agreement Authorization form obtained at the home district college. Gateway Technical College residents will be assessed a slightly higher tuition rate upon presentation of the Joint Agreement Authorization.

Elgin Community College residents:
- Architectural Technology (A.A.S. and Certificate)
- Building Construction Technology (A.A.S. and Certificate)
- Library Technical Assistant (A.A.S.)
- Medical Imaging (A.A.S.)
- Water-Wastewater (Certificates)

Gateway Technical College residents:
- Chemical Technology (A.A.S. and Certificate)
- Civil Technology-Environmental Option (A.A.S.)
- Human Services ASAAD (A.A.S.)
- Machine Tool Trades (A.A.S.)
- Medical Imaging (A.A.S.)
- Medical Laboratory Technology (A.A.S.)
- Tool & Moldmaker (Certificate)
- Water-Wastewater (Certificates)

McHenry County College residents:
Architectural Technology (A.A.S. and Certificate)
Automotive Collision Repair (Certificate)
Building Construction Technology (A.A.S. and Certificate)
Chemical Technology (A.A.S. and Certificate)
Civil Technology (A.A.S. and Certificate)
CNC Programming (A.A.S. and Certificate)
Dental Hygiene (A.A.S.)
EKG Interpretation (Course VALH 7)
Electrical/Electronic Maintenance (Certificate)
Fire Science (A.A.S.)
Food Service Management (A.A.S.)
Current Nursing Practice Update (Course VALH 20)
12-Lead ECG Interpretation (Course VALH 9)
Horse Series (Courses VPET 10-15)
Health Information Technology (A.A.S.)
Human Services and ASAAD Option (AAS and Certificate)
Industrial Maintenance and Repair (A.A.S. and Certificate
Library Technical Assistant (A.A.S. and Certificate)
Machine Tool Trades (A.A.S. and Certificate)
Medical Imaging (A.A.S.)
Medical Laboratory Technology (A.A.S.)
Medical Transcription (Certificate)
Nursing (A.A.S.)
Phlebotomy Technician (Certificate)
Refrigeration/Air Conditioning (A.A.S. and Certificates)
Technical Communication (A.A.S. and Certificate)
Water-Wastewater (Certificates)
Welding (Certificates)

Oakton Community College residents:
Architecture courses
Automotive Collision Repair (Certificate)
Human Services ASAAD Option (A.A.S.)
Horticulture (A.A.S. and Certificates)
Food Service/Culinary Arts (Certificate)
Library Technical Assistant (A.A.S. and Certificate)
Welding (Certificates)

William Rainey Harper College residents:
Automotive Collision Repair (Certificate)
Automotive Technology (A.A.S. and Certificates)
Building Construction Technology (A.A.S. and Certificate)
Chemical Technology (A.A.S. and Certificate)
Civil Technology (A.A.S. and Certificate)
Health Information Technology (A.A.S.)
Human Services (A.A.S. and Certificates)
Industrial Maintenance and Repair (A.A.S. and Certificate)
Library Technical Assistant (A.A.S. and Certificate)
Medical Imaging (A.A.S.)
Technical Communication (A.A.S. and Certificate)
Tool & Moldmaker (Certificate)
Water-Wastewater (Certificates)
Welding (Certificates) WLD 170 not included

Graduation Requirements for Associate in Arts, Associate in Science, Associate in Engineering Science, and Associate in Fine Arts Degrees

Petition for Graduation

All students who intend to receive a degree or certificate must complete a Petition for Graduation. Students must meet the general requirements for associate degrees and must successfully complete the specific General Education Requirements as defined by CLC's catalog at the time they are first enrolled, or at the time they petition for graduation.

Students who have not enrolled in any course listed in the CLC class schedule for at least two years will be designated as ***inactive***. Inactive students who register for courses will be governed by the college catalog covering the semester in which they re-enroll.

General Requirements for Associate Degrees

1. The satisfactory completion of no fewer than 60 semester hours for the A.A. and A.S. degrees, no fewer than 65 hours for the A.E.S. degree, and no fewer than 62 hours for the A.F.A. degrees.
2. Completion of at least 15 of the last 30 semester hours of instruction while in attendance at the College of Lake County. (Does not include credit earned by examination or transfer.) Servicemembers and their spouses enrolled in the Servicemember's Opportunity College Program and Navy personnel enrolled in the Navy Campus for Achievement Program may meet the graduation requirements regarding semester hours at the College by completing a minimum of 15 semester hours, if his or her active duty assignment takes him or her to a base preventing his or her attendance at College of Lake County courses.
3. The maintenance of a C (2.00) average for all work at CLC used to compute the grade point average.
4. Compliance with the requirement regarding the Constitution Examination (Senate Bill 195 of the 68th General Assembly of the State of Illinois) by any one of the following means:
   a. Passing the College of Lake County proficiency examination covering the Constitution of the United States and the State of Illinois and the proper use and display of the American flag.
   b. Passing Political Science 121 or History 221 at CLC.
   c. Presenting an official Illinois high school transcript which clearly gives evidence that this requirement was satisfied for high school graduation.
   d. Completing the requirement at another institution of higher education in the State of Illinois.
5. The satisfactory completion of the General Education Requirements for the appropriate degree.

Special Notations for Associate Degree Requirements

A. General Education Requirements must be fulfilled with middle digit 2, 4, or 6 courses, e.g. ENG 121. Exception: up to nine (9) hours of middle digit 1, 3, 5, 7, or 9 courses that have been articulated with three or more public Illinois universities may be used as general electives in the A.A. or A.S. degrees. For an approved list of articulated courses, contact the Counseling Center, Admissions and Records, or division offices.

B. One course in International/Multicultural Education must be taken from the following list.

Humanities & Fine Arts		Social & Behavioral Science	
ARA (Any course)	HUM 121	ANT 121	HST 123
ART 240	HUM 122	ANT 221	HST 124
ART 241	HUM 124	ECO 225	HST 126
ART 242	HUM 128	GEG 122	HST 127
CHI (Any course)	HUM 221	GEG 123	HST 240
ENG 128	HUM 226	GEG 223	HST 241
ENG 129	HUM 228	HST 121	PSC 221
ENG 228	ITL (Any course)	HST 122	SSI 124
ENG 244	JPN (Any course)		
ENG 246	PHI 123		**Business**
ENG 247	PHI 125		BUS 270
ENG 263	PHI 129		
ENG 264	RUS (Any course)		
FRN (Any course)	SPA (Any course)		
GER (Any course)			

The course taken to fulfill the International/Multicultural Education requirement will count toward the Humanities and Fine Arts, or Social and Behavioral Science general education requirement.

C. Except for the International/Multicultural Education requirement, no course may be used to satisfy more than one general education requirement.

D. No more than four credit hours earned in PDS 120 or PDS 121 may count as elective credit.

E. The following courses cannot be used to satisfy degree requirements and do not count in the grade point average.
   a. Courses with a middle digit of 0, (e.g. ENG 108, ENG 109, and MTH 101).
   b. Adult Education courses with a department prefix of ABE, ADE, ESL, GED, or VST.
   c. General Studies courses.

F. Under special circumstances, exceptions will be made on an individual basis. Course substitution forms should be directed to the Assistant Vice President of Educational Affairs.

1, 7, or 9 Courses That May *Not* Be Used As Electives In Any AA or AS Degrees For 2001-2002

The following courses do not articulate with three or more public Illinois universities. Students pursuing an Associate in Arts or Associate of Science degree may not use these courses with a middle digit "1," "7," or "9" courses as elective credit. Any other substitutions must be approved by the student's academic advisor or counselor and requires submission of the Course Substitution Approval Form.

- ABR 115, 118
- BSS 175
- BUS 211
- CIS 113, 171, 212, 213, 217, 234, 235
- CNA 111, 112
- COM 299
- DHY - all courses
- ECE 271, 272
- EDU 299
- ELT 271, 272
- EMF - all courses
- EMT 111, 113
- FST 215
- HRT 216, 277
- HUS 219, 299
- MIM 170, 271
- MLT 113, 114, 116, 271, 272, 273, 274, 275
- MTH 114
- NUR 110, 173
- PHY 115, 116
- PRS 111, 112
- RAC 176
- WWW 119, 299

General Education Learning Outcomes

Students who receive an Associate in Arts or Associate in Science degree at the College of Lake County must complete 37 hours of general education courses which are distributed among five areas: communication arts, mathematics, humanities and fine arts, physical and life sciences, and social and behavioral sciences. To fulfill these requirements, students must meet specific course, credit hour, and distribution requirements in each area and maintain an appropriate grade point average. The distribution requirements were selected in relation to learning outcomes developed by the faculty and approved by the Board of Trustees.

Students who graduate from the College of Lake County with an Associate in Arts, Associate in Science, Associate in Engineering Science, or Associate in Fine Arts degree should be able to demonstrate that they have attained skills in communication, critical thinking and mathematics and developed knowledge in humanities and fine arts, physical and life sciences, and social and behavioral sciences as defined by the following educational goals.

Communication and Critical Thinking
1. Use language for a variety of purposes
2. Use language appropriate for a variety of audiences
3. Pomprehend and use college-level vocabulary including specialized vocabulary of academic disciplines
4. Present ideas in an orderly way
5. Write and speaking clearly, concisely, and logically
6. Write in a variety of formats
7. Write a documented research paper
8. Use the conventions of standard written English
   a. Gather information according to task
   b. Organize and integrate information to support a thesis
   c. Summarize information accurately
   d. Make logical inferences
   e. Recognize cultural, political, and ethical assumptions and the values underlying language and argument
   f. Analyze strengths and weaknesses of arguments
   g. Apply problem solving skills
   h. Anticipate potential problems and generate possible solutions

Mathematics
1. Reach appropriate conclusions by using the structure of elementary symbolic logic to recognize the difference between valid and fallacious arguments
2. Analyze data using elementary statistical techniques
3. Construct graphs, charts, or tables from data
4. Determine whether a proposed solution to a mathematical problem is reasonable from the context of the problem
5. Formulate and compare alternative solution strategies to mathematical problems to determine which techniques are efficient and generally practicable

Humanities and Fine Arts
1. Develop an appreciation for the creative processes in fields such as art, music, literature, theatre, architecture, dance, language, philosophy, and film
2. Develop an appreciation for the diversity of the values and ideas of various periods and cultures
3. Understand the importance of symbols (e.g. verbal, visual, and musical) in communicating human emotion, ideas, and values across a variety of media
4. Be able to analyze and evaluate artistic artifacts

Physical and Life Sciences
1. Understand at an introductory level the major concepts of science
2. Understand the scientific method
3. Understand the nature and importance of basic scientific research in terms of its capabilities and limitations, its importance to the advancement of science and technology, its importance to seemingly unrelated disciplines
4. Understand that scientific discoveries and technological developments often have unforeseen consequences, both positive and negative
5. Understand that scientific knowledge is not static, but is a dynamic, ever-changing body of knowledge based on reproducible experiments
6. Be familiar with principles of precise measurement, data collection, reliability of information, and interpretation of data
7. Understand and know how to use typical laboratory equipment and materials
8. Apply scientific concepts learned in class to their personal lives
9. Understand and evaluate technical information intended for the general public

Social and Behavioral Sciences
1. Understand the scientific method as it is used and where it is applicable in the social sciences
2. Learn the specialized vocabulary of the social sciences and how it is applied
3. Understand the ways in which social science hypotheses are developed
4. Understand the ways in which social science hypotheses are tested for validity

Associate in Arts Degree

Students may obtain an Associate in Arts degree from the College of Lake County by successfully completing the 60 credits outlined below and by meeting the graduation requirements listed on page 46.

Students who have not enrolled in any course listed in the CLC class schedule for at least two years will be designated as ***inactive***. Inactive students who register for courses will be governed by the college catalog covering the semester in which they re-enroll.

The College of Lake County is a participant in the Illinois Articulation Initiative (IAI), a statewide agreement that allows transfer of the completed Illinois General Education Core Curriculum between participating institutions. The 60 credits needed for the Associate in Arts Degree contain the General Education Core. Completion of the transferable General Education Core Curriculum at any participating college or university in Illinois assures transferring students that lower-division general education requirements for an associate or bachelor's degree have been satisfied. See list on page 43. ***The IAI course numbers are in bold (e.g. C1900); you must not select two courses with the same IAI course number.***

For more information on the Illinois Articulation Initiative see page 43.

The IAI is limited to those students who are first-time college students since May 1998.

It is important to meet with an advisor to update your educational plan. Please check the courses you complete each term to assist you in this process.

Associate in Arts Degree continues on next page.

Associate in Arts Degree - also see preceding page.

Communication - 9 credit hours

Effective with freshmen entering in summer 1999, a grade of C or better will be required for satisfactory completion of the Communication writing requirement of the IAI.

- ☐ ENG 121 English Composition I (3) **C1 900**
- ☐ ENG 122 English Composition II (3) **C1 901 R**

or

- ☐ ENG 126 Advanced Composition:Scientific and Technical Communications (3) **C1 901 R**

and

- ☐ SPE 121 Fundamentals of Speech (3) **C2 900**

Mathematics - 3 credit hours

- ☐ MTH 127 Finite Mathematics I (3) **M1 906**
- ☐ MTH 141 Quantitative Literacy (3) **M1 901**
- ☐ MTH 145 Calculus and Analytic Geometry I (5) **M1 900**
- ☐ MTH 146 Calculus and Analytic Geometry II (4) **M1 900**
- ☐ MTH 221 Mathematics for Elementary Teaching II (3) **M1 903**
- ☐ MTH 222 Elementary Statistics (4) **M1 902**
- ☐ MTH 224 Introduction to Mathematical Analysis (4) **M1 900**
- ☐ MTH 244 Discrete Mathematics (3) **M1 905**
- ☐ MTH 246 Calculus and Analytic Geometry III (4) **M1 900**

Humanities and Fine Arts - 9 credit hours

- At least one course must be selected from Humanities and one course from Fine Arts.

Humanities

- ☐ ARA 222 Intermediate Modern Standard Arabic II (4) **H1 900**
- ☐ CHI 222 Intermediate Chinese II (4) **H1 900**
- ☐ ENG 129 Women In Literature (3) **H3 911D**
- ☐ ENG 223 Survey of Major American Writers (3) **H3 914**
- ☐ ENG 225 Major Trends English Literature (3) **H3 912**
- ☐ ENG 226 Modern English Literature (3) **H3 913**
- ☐ ENG 227 Introduction to Shakespeare (3) **H3 905**
- ☐ ENG 228 World Literature (3) **H3 906**
- ☐ ENG 229 20th Century American Literature (3) **H3 915**
- ☐ ENG 241 Introduction to Poetry (3) **H3 903**
- ☐ ENG 243 Introduction to Fiction (3) **H3 901**
- ☐ ENG 244 Mythology and Fairy Tales (3) **H9 901**
- ☐ ENG 246 Latin American Writers (3) **H3 908N**
- ☐ ENG 247 International Women Writers (3) **H3 911D**
- ☐ FRN 222 Intermediate French II (4) **H1 900**
- ☐ FRN 223 French Civilization I (3) **H1 900**
- ☐ FRN 224 French Civilization II (3) **H1 900**
- ☐ GER 222 Intermediate German II (4) **H1 900**
- ☐ GER 223 German Civilization I (3) **H1 900**
- ☐ GER 224 German Civilization II (4) **H1 900**
- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 127 Critical Thinking (3) **H4 906**
- ☐ HUM 128 Introduction to Mid-Eastern Civilizations (3) **H2 903 N**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 226 Women and the Arts (3) **HF 907D**
- ☐ ITL 222 Intermediate Italian II (4) **H1 900**
- ☐ ITL 223 Italian Civilization I (4) **H1 900**
- ☐ ITL 224 Italian Civilization II (4) **H1 900**
- ☐ JPN 222 Intermediate Japanese II (4) **H1 900**
- ☐ PHI 121 Introduction to Philosophy (3) **H4 900**
- ☐ PHI 122 Logic (3) **H4 906**
- ☐ PHI 123 Philosophy of Religion (3) **H4 905**
- ☐ PHI 125 Introduction to Ethics (3) **H4 904**
- ☐ RUS 222 Intermediate Russian II (4) **H1 900**
- ☐ SPA 222 Intermediate Spanish II (3) **H1 900**
- ☐ SPA 223 Spanish Civilization I (3) **H1 900**
- ☐ SPA 224 Spanish Civilization II (3) **H1 900**

Fine Arts

- ☐ ART 121 Introduction to Art (3) **F2 900**
- ☐ ART 240 History of Art I (3) **F2 901**
- ☐ ART 241 History of Art II (3) **F2 902**
- ☐ ART 242 History of Art III (3) **F2 902**
- ☐ ART 260 History of Photography (3) **F2 904**
- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 123 Introduction to Film (3) **F2 905**
- ☐ HUM 125 Introduction to Fine Arts I (3) **F2 900**
- ☐ HUM 126 Introduction to the Performing Arts (3) **F9 900**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 222 Film and Society (3) **F2 905**
- ☐ HUM 225 The Art of Dance (3) **F1 906**
- ☐ HUM 226 Women and the Arts (3) **HF 907 D**
- ☐ MUS 124 Introduction to Music (3) **F1 900**
- ☐ MUS 224 Music Literature (3) **F1 902**
- ☐ THE 121 Introduction to Theater I (3) **F1 907**

Physical and Life Sciences -7 credit hours

- One course must be selected from Physical Science and one course from Life Science
- At least one course must be a laboratory science course (LAB).

Associate in Arts Degree continues on next page.

Associate in Arts Degree - also see preceeding page.

Physical Science

- ☐ AST 121 (LAB) Introduction to Astronomy (4) **P1 906L**
- ☐ CHM 120 (LAB) Chemical Concepts (4) **P1 902L**
- ☐ CHM 121 (LAB) General Chemistry I (5) **P1 902L**
- ☐ GEG 121 Physical Geography (3) **P1 909**
- ☐ GEO 120 Earth Science (4) **P1 905**
- ☐ GEO 121 (LAB) Physical Geology (4) **P1 907L**
- ☐ GEO 124 Oceanography (3) **P1 905**
- ☐ GEO 224 Environmental Geology (3) **P1 908**
- ☐ PHY 120 (LAB) Practical Aspects of Physics (4) **P1 901L**
- ☐ PHY 121 (LAB) General Physics I (5) **P1 900L**
- ☐ PHY 123 (LAB) Physics for Science and Engineers (5) **P2 900L**

Life Science

- ☐ BIO 120 (LAB) Environmental Biology (4) **L1 905L**
- ☐ BIO 121 (LAB) General Biology I (4) **L1 900L**
- ☐ BIO 127 Introduction to Evolution (3) **L1 907**

Social and Behavioral Sciences - 9 credit hours

- Courses must be selected from at least two different disciplines i.e. have different prefixes.

- ☐ ANT 121 Introduction to Anthropology (3) **S1 902**
- ☐ ANT 221 Cultural Anthropology (3) **S1 901N**
- ☐ ANT 224 Introduction to Archaeology (3) **S1 903**
- ☐ ECO 221 Principles of Macroeconomics (3) **S3 901**
- ☐ ECO 222 Principles of Microeconomics (3) **S3 902**
- ☐ GEG 122 Cultural Geography (3) **S4 900 N**
- ☐ GEG 123 World Regional Geography (3) **S4 900N**
- ☐ HST 121 History of Western Civilization I (3) **S2 902**
- ☐ HST 122 History of Western Civilization II (3) **S2 903**
- ☐ HST 126 History of Contemporary Non-Western Civilization (3) **S2 905N**
- ☐ HST 127 History of Chinese Culture and Society (3) **S2 914N**
- ☐ HST 221 United States History to 1876 (3) **S2 900**
- ☐ HST 222 United States History 1876 to Present (3) **S2 901**
- ☐ PSC 121 American National Politics (3) **S5 900**
- ☐ PSC 122 State and Local Politics (3) **S5 902**
- ☐ PSC 221 Comparative Political Systems (3) **S5 905**
- ☐ PSY 121 Introduction to Psychology (3) **S6 900**
- ☐ PSY 222 Child Growth and Development (3) **S6 903**
- ☐ PSY 225 Social Psychology (3) **S8 900**
- ☐ SOC 121 Introduction to Sociology (3) **S7 900**
- ☐ SOC 222 Social Problems (3) **S7 901**
- ☐ SOC 224 Sociology of the Family (3) **S7 902**

Additional College AA Degree Requirements

- ☐ Include one course in International/Multicultural Education which must be taken from the list on page 61.

General Elective hours - 23 credit hours

- Choose courses with an ***even middle digit*** that relate to intended major for electives. Students should choose electives only after consulting with an advisor.
- ***Exception:*** Up to nine hours of middle digit 1, 3, 5, 7, 9 courses that have been articulated with three or more public Illinois universities may be used as general electives in the AA degree. The following courses may not be used for general electives: ABR 115, 118; BSS 175; BUS 211; CIS 113, 171, 212, 213, 217, 234, 235; CNA 111, 112; COM 299; DHY - all courses; ECE 271, 272; EDU 299; ELT 271, 272; EMF - all courses; EMT 111, 113; FST 215; HRT 216, 277; HUS 219, 299; MIM 170, 271; MLT 113, 114, 116, 271, 272, 273, 274, 275; MTH 114; NUR 110, 173; PHY 115, 116; PRS 111, 112; RAC 176; WWW 119, 299

NOTES:

Total Degree Requirements: 60 credit hours

Please review lists of recommended courses for individual programs of study as listed on pages 65-86 in this catalog.

Other Graduation Requirements:

- ☐ Constitution Requirement (recommended methods: Illinois high school transcript showing a graduation date of 1953 or later,PSC 121, HST 221, or proficiency exam)
- ☐ Cumulative CLC GPA of 2.00 or higher
- ☐ Minimum of 15 of last 30 hours at CLC
- ☐ Petition to Graduate available in Admissions and Records

IAI approved courses are subject to change. A list of currently approved courses is available in the Counseling Center or on the iTransfer website at http://www.iTransfer.org.

Associate in Science Degree

Students can obtain an Associate in Science degree from the College of Lake County by successfully completing the 60 credits outlined below and by meeting the graduation requirements listed on page 46.

Students who have not enrolled in any course listed in the CLC class schedule for at least two years will be designated as ***inactive***. Inactive students who register for courses will be governed by the college catalog covering the semester in which they re-enroll.

College of Lake County is a participant in the Illinois Articulation Initiative (IAI), a statewide agreement that allows of transfer the completed Illinois General Education Core Curriculum between participating institutions. The 60 credits needed for the Associate in Science Degree contain the General Education Core. Completion of the transferable General Education Core Curriculum at any participating college or university in Illinois assures transferring students that lower-division general education requirements for an associate or bachelor's degree have been satisfied. See list on page 43. ***The IAI course numbers are in bold (e.g. C1900); you must not select two courses with the same IAI course number.***

For more information on the Illinois Articulation Initiative see page 43.

The IAI is limited to those students who are first-time college students since May 1998.

It is important to meet with an advisor to update your educational plan. Please check the courses you complete each term to assist you in this process.

Communication - 9 credit hours

Effective with freshmen entering in summer 1999, a grade of C or better will be required for satisfactory completion of the Communication writing requirement of the IAI.

- ☐ ENG 121 English Composition I (3) **C1 900**
- ☐ ENG 122 English Composition II (3) **C1 901 R**

or

- ☐ ENG 126 Advanced Composition: Scientific and Technical Communications (3) **C1 901 R**

and

- ☐ SPE 121 Fundamentals of Speech (3) **C2 900**

Mathematics - 8 credit hours

3 credits MUST be selected from the courses with an IAI number (shown in bold) in order to meet CLC graduation requirements. This will also meet the IAI general education core.

- ☐ MTH 122 College Algebra (4)
- ☐ MTH 123 Trigonometry (3)
- ☐ MTH 127 Finite Mathematics I (3) **M1 906**
- ☐ MTH 141 Quantitative Literacy (3) **M1 901**
- ☐ MTH 144 Precalculus (5)
- ☐ MTH 145 Calculus and Analytic Geometry I (5) **M1 900**
- ☐ MTH 146 Calculus and Analytic Geometry II (4) **M1 900**
- ☐ MTH 221 Math for Elementary Teaching II (3) **M1 903**
- ☐ MTH 222 Elementary Statistics (4) **M1 902**
- ☐ MTH 224 Introduction to Mathematical Analysis (4) **M1 900**
- ☐ MTH 227 Ordinary Differential Equations (3)
- ☐ MTH 244 Discrete Mathematics (3) **M1 905**
- ☐ MTH 246 Calculus and Analytic Geometry III (4) **M1 900**

Humanities and Fine Arts - 9 credit hours

- At least one course must be selected from Humanities and one course from Fine Arts.

Humanities

- ☐ ARA 222 Intermediate Modern Standard Arabic II (4) **H1 900**
- ☐ CHI 222 Intermediate Chinese II (4) **H1 900**
- ☐ ENG 129 Women In Literature (3) **H3 911D**
- ☐ ENG 223 Survey of Major American Writers (3) **H3 914**
- ☐ ENG 225 Major Trends English Literature (3) **H3 912**
- ☐ ENG 226 Modern English Literature (3) **H3 913**
- ☐ ENG 227 Introduction to Shakespeare (3) **H3 905**
- ☐ ENG 228 World Literature (3) **H3 906**
- ☐ ENG 229 20th Century American Literature (3) **H3 915**
- ☐ ENG 241 Introduction to Poetry (3) **H3 903**
- ☐ ENG 243 Introduction to Fiction (3) **H3 901**
- ☐ ENG 244 Mythology and Fairy Tales (3) **H9 901**
- ☐ ENG 246 Latin American Writers (3) **H3 908N**
- ☐ ENG 247 International Women Writers (3) **H3 911D**
- ☐ FRN 222 Intermediate French II (4) **H1 900**
- ☐ FRN 223 French Civilization I (3) **H1 900**
- ☐ FRN 224 French Civilization II (3) **H1 900**
- ☐ GER 222 Intermediate German II (4) **H1 900**
- ☐ GER 223 German Civilization I (3) **H1 900**
- ☐ GER 224 German Civilization II (4) **H1 900**
- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 127 Critical Thinking (3) **H4 906**

Associate in Science Degree continues on next page.

Associate in Science Degree - also see preceding page.

- ☐ HUM 128 Introduction to Mid-Eastern Civilizations (3) **H2 903 N**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 226 Women and the Arts (3) **HF 907D**
- ☐ ITL 222 Intermediate Italian II (4) **H1 900**
- ☐ ITL 223 Italian Civilization I (4) **H1 900**
- ☐ ITL 224 Italian Civilization II (4) **H1 900**
- ☐ JPN 222 Intermediate Japanese II (4) **H1 900**
- ☐ PHI 121 Introduction to Philosophy (3) **H4 900**
- ☐ PHI 122 Logic (3) **H4 906**
- ☐ PHI 123 Philosophy of Religion (3) **H4 905**
- ☐ PHI 125 Introduction to Ethics (3) **H4 904**
- ☐ RUS 222 Intermediate Russian II (4) **H1 900**
- ☐ SPA 222 Intermediate Spanish II (4) **H1 900**
- ☐ SPA 223 Spanish Civilization I (3) **H1 900**
- ☐ SPA 224 Spanish Civilization II (3) **H1 900**

Fine Arts

- ☐ ART 121 Introduction to Art (3) **F2 900**
- ☐ ART 240 History of Art I (3) **F2 901**
- ☐ ART 241 History of Art II (3) **F2 902**
- ☐ ART 242 History of Art III (3) **F2 902**
- ☐ ART 260 History of Photography (3) **F2 904**
- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 123 Introduction to Film (3) **F2 905**
- ☐ HUM 125 Introduction to Fine Arts I (3) **F2 900**
- ☐ HUM 126 Introduction to the Performing Arts (3) **F9 900**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 222 Film and Society (3) **F2 905**
- ☐ HUM 225 The Art of Dance (3) **F1 906**
- ☐ HUM 226 Women and the Arts (3) **HF 907 D**
- ☐ MUS 124 Introduction to Music (3) **F1 900**
- ☐ MUS 224 Music Literature (3) **F1 902**
- ☐ THE 121 Introduction to Theater I (3) **F1 907**

Physical and Life Sciences - 8 credit hours

8 credit hrs. One course must be selected from Physical Science and one course from Life Science. Both courses must be Laboratory courses (LAB)

Physical Science

- ☐ AST 121 (LAB) Introduction to Astronomy (4) **P1 906L**
- ☐ CHM 120 (LAB) Chemical Concepts (4) **P1 902L**
- ☐ CHM 121 (LAB) General Chemistry I (5) **P1 902L**
- ☐ GEG 121 Physical Geography (3) **P1 909**
- ☐ GEO 120 Earth Science (4) **P1 905**
- ☐ GEO 121 (LAB) Physical Geology (4) **P1 907L**
- ☐ GEO 124 Oceanography (3) **P1 905**
- ☐ GEO 224 Environmental Geology (3) **P1 908**
- ☐ PHY 120 (LAB) Practical Aspects of Physics (4) **P1 901L**
- ☐ PHY 121 (LAB) General Physics I (5) **P1 900L**
- ☐ PHY 123 (LAB) Physics for Science and Engineering I (5) **P2 900L**

Life Science

- ☐ BIO 120 (LAB) Environmental Biology (4) **L1 905L**
- ☐ BIO 121 (LAB) General Biology I (4) **L1 900L**
- ☐ BIO 127 Introduction to Evolution (3) **L1 907**

Social and Behavioral Sciences - 9 credit hours

- Courses must be selected from at least two different disciplines i.e. have different prefixes.

- ☐ ANT 121 Introduction to Anthropology (3) **S1 902**
- ☐ ANT 221 Cultural Anthropology (3) **S1 901N**
- ☐ ANT 224 Introduction to Archaeology (3) **S1 903**
- ☐ ECO 221 Principles of Macroeconomics (3) **S3 900**
- ☐ ECO 222 Principles of Microeconomics (3) **S3 900**
- ☐ GEG 122 Cultural Geography (3) **S4 900N**
- ☐ GEG 123 World Regional Geography (3) **S4 900N**
- ☐ HST 121 History of Western Civilization I (3) **S2 902**
- ☐ HST 122 History of Western Civilization II (3) **S2 903**
- ☐ HST 126 History of Contemporary Non-Western Civilization (3) **S2 905N**
- ☐ HST 127 History of Chinese Culture and Society (3) **S2 914N**
- ☐ HST 221 United States History to 1876 (3) **S2 900**
- ☐ HST 222 United States History 1876 to Present (3) **S2 901**
- ☐ PSC 121 American National Politics (3) **S5 900**
- ☐ PSC 122 State and Local Politics (3) **S5 902**
- ☐ PSC 221 Comparative Political Systems (3) **S5 905**
- ☐ PSY 121 Introduction to Psychology (3) **S6 900**
- ☐ PSY 222 Child Growth and Development (3) **S6 903**
- ☐ PSY 225 Social Psychology (3) **S8 900**
- ☐ SOC 121 Introduction to Sociology (3) **S7 900**
- ☐ SOC 222 Social Problems (3) **S7 901**
- ☐ SOC 224 Sociology of the Family (3) **S7 902**

Additional College AS Degree Requirements

- ☐ Include one course in International/Multicultural Education which must be taken from the list on page 61.

General Elective hours - 17 credit hours

- Choose courses with an ***even middle digit*** that relate to intended major for electives. Students should choose electives only after consulting with an advisor.

Associate in Science Degree continues on next page.

Associate in Science Degree - also see preceding page.

- ***Exception:*** Up to nine hours of middle digit 1, 3, 5, 7, 9 courses that have been articulated with three or more public Illinois universities may be used as general electives in the AS degree. The following courses may not be used for general electives: ABR 115, 118; BSS 175; BUS 211; CIS 113, 171, 212, 213, 217, 234, 235; CNA 111, 112; COM 299; DHY - all courses; ECE 271, 272; EDU 299; ELT 271, 272; EMF - all courses; EMT 111, 113; FST 215; HRT 216, 277; HUS 219, 299; MIM 170, 271; MLT 113, 114, 116, 271, 272, 273, 274, 275; MTH 114; NUR 110, 173; PHY 115, 116; PRS 111, 112; RAC 176; WWW 119, 299

NOTES:

Total Degree Requirements: 60 credit hours

Please review lists of recommended courses for individual programs of study as listed on pages 65-86 in this catalog.

Other Graduation Requirements:

☐ Constitution Requirement (recommended methods: Illinois high school transcript showing a graduation date of 1953 or later, PSC 121, HST 221, or proficiency exam)
☐ Cumulative CLC GPA of 2.00 or higher
☐ Minimum of 15 of last 30 hours at CLC
☐ Petition to Graduate available in Admissions and Records

IAI approved courses are subject to change. A list of currently approved courses is available in the Counseling Center or on the iTransfer website at http://www.iTransfer.org.

Associate in Engineering Science Degree

Students may obtain an Associate in Engineering Science degree from the College of Lake County by successfully completing the 60 credits outlined below and by meeting the graduation requirements listed on page 46.

Students who have not enrolled in any course listed in the CLC class schedule for at least two years will be designated as ***inactive***. Inactive students who register for courses will be governed by the college catalog covering the semester in which they re-enroll.

College of Lake County is a participant in the Illinois Articulation Initiative (IAI), a statewide agreement that allows transfer of the completed Illinois General Education Core Curriculum between participating institution. The 60 credits needed for the Associate in Engineering Science Degree contain a ***portion*** of the General Education Core. Completion of the transferable General Education Core Curriculum at any participating college or university in Illinois assures transferring students that lower-division general education requirements for an associate or bachelor's degree have been satisfied. **The IAI course numbers are in bold (e.g. C1900).**

For more information on the Illinois Articulation Initiative see page 43.

The IAI is limited to those students who are first-time college students since May 1998.

It is important to meet with an advisor to update your educational plan. Please check the courses you complete each term to assist you in this process.

Communication - 6 credit hours

Effective with freshmen entering in summer 1999, a grade of C or better will be required for satisfactory completion of the Communication writing requirement of the IAI.

☐ ENG 121 English Composition I (3) **C1 900**
☐ ENG 122 English Composition II (3) **C1 901 R**
or
☐ ENG 126 Advanced Composition: Scientific and Technical Communications (3) **C1 901 R**

Mathematics - 16 credit hours minimum

☐ MTH 145 Calculus and Analytic Geometry I (5) **M1 900**
☐ MTH 146 Calculus and Analytic Geometry II (4) **M1 900**
☐ MTH 227 Ordinary Differential Equations (3)
☐ MTH 246 Calculus and Analytic Geometry III (4)

Associate in Engineering Science Degree continues on next page.

Associate in Engineering Science Degree - also see preceding page.

Humanities and Fine Arts - 3 credit hours from either discipline

Humanities

- ☐ ARA 222 Intermediate Modern Standard Arabic II (4) **H1 900**
- ☐ CHI 222 Intermediate Chinese II (4) **H1 900**
- ☐ ENG 129 Women In Literature (3) **H3 911D**
- ☐ ENG 223 Survey of Major American Writers (3) **H3 914**
- ☐ ENG 225 Major Trends English Literature (3) **H3 912**
- ☐ ENG 226 Modern English Literature (3) **H3 913**
- ☐ ENG 227 Introduction to Shakespeare (3) **H3 905**
- ☐ ENG 228 World Literature (3) **H3 906**
- ☐ ENG 229 20th Century American Literature (3) **H3 915**
- ☐ ENG 241 Introduction to Poetry (3) **H3 903**
- ☐ ENG 243 Introduction to Fiction (3) **H3 901**
- ☐ ENG 244 Mythology and Fairy Tales (3) **H9 901**
- ☐ ENG 246 Latin American Writers (3) **H3 908N**
- ☐ ENG 247 International Women Writers (3) **H3 911D**
- ☐ FRN 222 Intermediate French II (4) **H1 900**
- ☐ FRN 223 French Civilization I (3) **H1 900**
- ☐ FRN 224 French Civilization II (3) **H1 900**
- ☐ GER 222 Intermediate German II (4) **H1 900**
- ☐ GER 223 German Civilization I (3) **H1 900**
- ☐ GER 224 German Civilization II (4) **H1 900**
- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 127 Critical Thinking (3) **H4 906**
- ☐ HUM 128 Introduction to Mid-Eastern Civilizations (3) **H2 903 N**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 226 Women in the Arts (3) **HF 907D**
- ☐ ITL 222 Intermediate Italian II (4) **H1 900**
- ☐ ITL 223 Italian Civilization I (4) **H1 900**
- ☐ ITL 224 Italian Civilization II (4) **H1 900**
- ☐ JPN 222 Intermediate Japanese II (4) **H1 900**
- ☐ PHI 121 Introduction to Philosophy (3) **H4 900**
- ☐ PHI 122 Logic (3) **H4 906**
- ☐ PHI 123 Philosophy of Religion (3) **H4 905**
- ☐ PHI 125 Introduction to Ethics (3) **H4 904**
- ☐ RUS 222 Intermediate Russian II (4) **H1 900**
- ☐ SPA 222 Intermediate Spanish II (4) **H1 900**
- ☐ SPA 223 Spanish Civilization I (3) **H1 900**
- ☐ SPA 224 Spanish Civilization II (3) **H1 900**

Fine Arts

- ☐ ART 121 Introduction to Art (3) **F2 900**
- ☐ ART 240 History of Art I (3) **F2 901**
- ☐ ART 241 History of Art II (3) **F2 902**
- ☐ ART 242 History of Art III (3) **F2 902**
- ☐ ART 260 History of Photography (3) **F2 904**
- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 123 Introduction to Film (3) **F2 905**
- ☐ HUM 125 Introduction to Fine Arts I (3) **F2 900**
- ☐ HUM 126 Introduction to the Performing Arts (3) **F9 900**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 225 The Art of Dance (3) **F1 906**
- ☐ HUM 226 Women and the Arts (3) **HF 907 D**
- ☐ MUS 124 Introduction to Music (3) **F1 900**
- ☐ MUS 224 Music Literature (3) **F1 902**
- ☐ THE 121 Introduction to Theater I (3) **F1 907**

Science- 19 credit hours minimum

- ☐ CHM 121 (LAB) General Chemistry I (5) **P1 902L**
- ☐ CHM 123 General Chemistry II (5)
- ☐ CHM 222 Organic Chemistry I (5)
- ☐ PHY 123 Physics for Science and Engineering I (5) **P2 900L**
- ☐ PHY 124 Physics for Science and Engineering II (5)
- ☐ PHY 221 Physics for Science and Engineering III (4)

Social and Behavioral Sciences - 3 credit hours

- ☐ ANT 121 Introduction to Anthropology (3) **S1 902**
- ☐ ANT 221 Cultural Anthropology (3) **S1 901N**
- ☐ ANT 224 Introduction to Archaeology (3) **S1 903**
- ☐ ECO 221 Principles of Macroeconomics (3) **S3 901**
- ☐ ECO 222 Principles of Microeconomics (3) **S3 902**
- ☐ GEG 122 Cultural Geography (3) **S4 900 N**
- ☐ GEG 123 World Regional Geography (3) **S4 900N**
- ☐ HST 121 History of Western Civilization I (3) **S2 902**
- ☐ HST 122 History of Western Civilization II (3) **S2 903**
- ☐ HST 126 History of Contemporary Non-Western Civilization (3) **S2 905N**
- ☐ HST 127 History.of Chinese Culture and Society (3) **S2 914N**
- ☐ HST 221 United States History to 1876 (3) **S2 900**
- ☐ HST 222 United States History 1876 to Present (3) **S2 901**
- ☐ PSC 121 American National Politics (3) **S5 900**
- ☐ PSC 122 State and Local Politics (3) **S5 902**
- ☐ PSC 221 Comparative Political Systems (3) **S5 905**
- ☐ PSY 121 Introduction to Psychology (3) **S6 900**
- ☐ PSY 222 Child Growth and Development (3) **S6 903**
- ☐ PSY 225 Social Psychology (3) **S8 900**
- ☐ SOC 121 Introduction to Sociology (3) **S7 900**
- ☐ SOC 222 Social Problems (3) **S7 901**
- ☐ SOC 224 Sociology of the Family (3) **S7 902**

Associate in Engineering Science Degree continues on next page

Associate in Engineering Science Degree - also see preceding page.

Computer Science - 3 credit hours minimum

- ☐ MCS 140 Computer Programming I (3) or
- ☐ MCS 142 Computer Programming II (3)

Engineering - 7 credit hours

- ☐ EGR 121 Engineering Graphics (3)
- ☐ EGR 221 Statics and Dynamics (5)
- ☐ EGR 222 Engineering Mechanics of Materials (3)
- ☐ EGR 260 Introduction to Circuit Analysis (4)

Additional College AES Degree Requirements - 3 credit hours

☐ Includes one course in International/Multicultural Education which must be taken from the lists on page 61.

NOTES:

Total Degree Requirements: 60 credit hours

Other Graduation Requirements:

- ☐ Constitution Requirement (recommended methods: Illinois high school transcript showing a graduation date of 1953 or later, PSC 121, HST 221, or proficiency exam)
- ☐ Cumulative CLC GPA of 2.00 or higher
- ☐ Minimum of 15 of last 30 hours at CLC
- ☐ Petition to Graduate available from Admissions and Records

IAI approved courses are subject to change. A list of currently approved courses is available in the Counseling Center or on the iTransfer website at http://www.iTransfer.org.

Associate in Fine Arts Degree in Art

Students may obtain an Associate in Fine Arts degree in Art by successfully completing 61-63 credits outlined below and by meeting the graduation requirements listed on page 46.

Students who have not enrolled in any course listed in the CLC class schedule for at least two years will be designated as ***inactive***. Inactive students who register for courses will be governed by the college catalog covering the semester in which they re-enroll.

This new degree meets the needs of students who plan to earn the professional Bachelor of Fine Arts degree (B.F.A.). Specifically the Associate in Fine Arts (A.F.A.) in art allows students to complete a greater number of their studio art requirements at the College of Lake County and thus facilitates the transfer process for students planning to enroll in a B.F.A. program at an Illinois college or university. Since completion of the A.F.A. degree does not fulfill the requirements of the Illinois General Education Core Curriculum, students will need to complete the general education requirements of the institution to which they transfer. Additionally, required art courses may not be able to be used to meet general education requirements at CLC and/or at some Illinois institutions.

It is important to meet with an advisor to update your educational plan. Please check the courses you complete each term to assist you in this process.

Communication - 9 credit hours

Effective with freshmen entering in summer 1999, a grade of C or better will be required for satisfactory completion of the Communication writing requirement of the IAI.

- ☐ ENG 121 English Composition I (3) **C1 900**
- ☐ ENG 122 English Composition II (3) **C1 901 R**

or

- ☐ ENG 126 Advanced Composition:Scientific and Technical Communications (3) **C1 901 R**

and

- ☐ SPE 121 Fundamentals of Speech (3) **C2 900**

Mathematics - 3-4 credit hours

- ☐ MTH 127 Finite Mathematics I (3) **M1 906**
- ☐ MTH 141 Quantitative Literacy (3) **M1 901**
- ☐ MTH 145 Calculus and Analytic Geometry I (5) **M1 900**
- ☐ MTH 146 Calculus and Analytic Geometry II (4) **M1 900**

Associate in Fine Arts Degree continues on next page

Associate in Fine Arts Degree - also see preceding page.

- ☐ MTH 221 Mathematics for Elementary Teaching II (3) **M1 903**
- ☐ MTH 222 Elementary Statistics (4) **M1 902**
- ☐ MTH 224 Introduction to Mathematical Analysis (4) **M1 900**
- ☐ MTH 244 Discrete Mathematics (3) **M1 905**
- ☐ MTH 246 Calculus and Analytic Geometry III (4) **M1 900**

Humanities and Fine Arts - 6 credit hours

- One course must be selected from Humanities and one course from Fine Arts.

Humanities

- ☐ ARA 222 Intermediate Modern Standard Arabic II (4) **H1 900**
- ☐ CHI 222 Intermediate Chinese II (4) **H1 900**
- ☐ ENG 129 Women In Literature (3) **H3 911D**
- ☐ ENG 223 Survey of Major American Writers (3) **H3 914**
- ☐ ENG 225 Major Trends English Literature (3) **H3 912**
- ☐ ENG 226 Modern English Literature (3) **H3 913**
- ☐ ENG 227 Introduction to Shakespeare (3) **H3 905**
- ☐ ENG 228 World Literature (3) **H3 906**
- ☐ ENG 229 20th Century American Literature (3) **H3 915**
- ☐ ENG 241 Introduction to Poetry (3) **H3 903**
- ☐ ENG 243 Introduction to Fiction (3) **H3 901**
- ☐ ENG 244 Mythology and Fairy Tales (3) **H9 901**
- ☐ ENG 246 Latin American Writers (3) **H3 908N**
- ☐ ENG 247 International Women Writers (3) **H3 911D**
- ☐ FRN 222 Intermediate French II (4) **H1 900**
- ☐ FRN 223 French Civilization I (3) **H1 900**
- ☐ FRN 224 French Civilization II (3) **H1 900**
- ☐ GER 222 Intermediate German II (4) **H1 900**
- ☐ GER 223 German Civilization I (3) **H1 900**
- ☐ GER 224 German Civilization II (4) **H1 900**
- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 127 Critical Thinking (3) **H4 906**
- ☐ HUM 128 Introduction to Mid-Eastern Civilizations (3) **H2 903 N**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 226 Women and the Arts (3) **HF 907D**
- ☐ ITL 222 Intermediate Italian II (4) **H1 900**
- ☐ ITL 223 Italian Civilization I (4) **H1 900**
- ☐ ITL 224 Italian Civilization II (4) **H1 900**
- ☐ JPN 222 Intermediate Japanese II (4) **H1 900**
- ☐ PHI 121 Introduction to Philosophy (3) **H4 900**
- ☐ PHI 122 Logic (3) **H4 906**
- ☐ PHI 123 Philosophy of Religion (3) **H4 905**
- ☐ PHI 125 Introduction to Ethics (3) **H4 904**
- ☐ RUS 222 Intermediate Russian II (4) **H1 900**
- ☐ SPA 222 Intermediate Spanish II (3) **H1 900**
- ☐ SPA 223 Spanish Civilization I (3) **H1 900**
- ☐ SPA 224 Spanish Civilization II (3) **H1 900**

Fine Arts

- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 123 Introduction to Film (3) **F2 905**
- ☐ HUM 125 Introduction to Fine Arts I (3) **F2 900**
- ☐ HUM 126 Introduction to the Performing Arts (3) **F9 900**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 222 Film and Society (3) **F2 905**
- ☐ HUM 225 The Art of Dance (3) **F1 906**
- ☐ HUM 226 Women and the Arts (3) **HF 907 D**
- ☐ MUS 124 Introduction to Music (3) **F1 900**
- ☐ MUS 140 20th Century Music (3) **F1 902**
- ☐ MUS 224 Music Literature (3) **F1 902**
- ☐ THE 121 Introduction to Theater I (3) **F1 907**

Physical and Life Sciences -7-8 credit hours

- One course must be selected from Physical Science and one course from Life Science
- At least one course must be a laboratory science course (LAB).

Physical Science

- ☐ AST 121 (LAB) Introduction to Astronomy (4) **P1 906L**
- ☐ CHM 120 (LAB) Chemical Concepts (4) **P1 902L**
- ☐ CHM 121 (LAB) General Chemistry I (5) **P1 902L**
- ☐ GEG 121 Physical Geography (3) **P1 909**
- ☐ GEO 120 Earth Science (4) **P1 905**
- ☐ GEO 121 (LAB) Physical Geology (4) **P1 907L**
- ☐ GEO 124 Oceanography (3) **P1 905**
- ☐ GEO 224 Environmental Geology (3) **P1 908**
- ☐ PHY 120 (LAB) Practical Aspects of Physics (4) **P1 901L**
- ☐ PHY 121 (LAB) General Physics I (5) **P1 900L**
- ☐ PHY 123 (LAB) Physics for Science and Engineers (5) **P2 900L**

Life Science

- ☐ BIO 120 (LAB) Environmental Biology (4) **L1 905L**
- ☐ BIO 121 (LAB) General Biology I (4) **L1 900L**
- ☐ BIO 127 Introduction to Evolution (3) **L1 907**

Social and Behavioral Sciences - 6 credit hours

- Courses must be selected from at least two different disciplines i.e. have different prefixes.

- ☐ ANT 121 Introduction to Anthropology (3) **S1 902**
- ☐ ANT 221 Cultural Anthropology (3) **S1 901N**
- ☐ ANT 224 Introduction to Archaeology (3) **S1 903**
- ☐ ECO 221 Principles of Macroeconomics (3) **S3 901**
- ☐ ECO 222 Principles of Microeconomics (3) **S3 902**
- ☐ GEG 122 Cultural Geography (3) **S4 900 N**

Associate in Fine Arts Degree continues on next page

Associate in Fine Arts Degree - also see preceding page.

- ☐ GEG 123 World Regional Geography (3) **S4 900N**
- ☐ HST 121 History of Western Civilization I (3) **S2 902**
- ☐ HST 122 History of Western Civilization II (3) **S2 903**
- ☐ HST 126 History of Contemporary Non-Western Civilization (3) **S2 914 N**
- ☐ HST 127 History of Chinese Culture and Society (3) **S2 909N**
- ☐ HST 221 United States History to 1876 (3) **S2 900**
- ☐ HST 222 United States History 1876 to Present (3) **S2 901**
- ☐ PSC 121 American National Politics (3) **S5 900**
- ☐ PSC 122 State and Local Politics (3) **S5 902**
- ☐ PSC 221 Comparative Political Systems (3) **S5 905**
- ☐ PSY 121 Introduction to Psychology (3) **S6 900**
- ☐ PSY 222 Child Growth and Development (3) **S6 903**
- ☐ PSY 225 Social Psychology (3) **S8 900**
- ☐ SOC 121 Introduction to Sociology (3) **S7 900**
- ☐ SOC 222 Social Problems (3) **S7 901**
- ☐ SOC 224 Sociology of the Family (3) **S7 902**

Additional College AFA Degree Requirements

Includes one course in International/Multicultural Education taken from the list on page 61.

Art - 21 credit hours

- ☐ ART 122 Basic Color and Design (3)
- ☐ ART 124 Basic Drawing (3)
- ☐ ART 127 Intermediate Drawing (3)
- ☐ ART 221 Advanced Design (3)
- ☐ ART 225 Figure Drawing (3)
- ☐ ART 240 History of Art I (3) **F2 901**
- ☐ ART 241 History of Art II (3) **F2 902**

Elective Studio - 9-11 credit hours

- ☐ ART 222 Computer Art (3)
- ☐ ART 223 Introduction to Sculpture (3)
- ☐ ART 224 Beginning Painting (3)
- ☐ ART 226 Introduction to Ceramics (3)
- ☐ ART 243 Introduction to Printmaking I (3)

NOTES:

Total Degree Requirements: 61-63 credit hours

Please review lists of recommended courses for individual programs of study as listed on pages 65-86 in this catalog.

Other Graduation Requirements:

- ☐ Constitution Requirement (recommended methods: Illinois high school transcript showing a graduation date of 1953 or later,PSC 121, HST 221, or proficiency exam)
- ☐ Cumulative CLC GPA of 2.00 or higher
- ☐ Minimum of 15 of last 30 hours at CLC
- ☐ Petition to Graduate available in Admissions and Records

Associate in Fine Arts Degree in Music Education

Students can obtain an Associate in Fine Arts degree in Music Education by successfully completing the 62 credits outlined below and by meeting the graduation requirements listed on page 46.

Students who have not enrolled in any course listed in the CLC class schedule for at least two years will be designated as ***inactive***. Inactive students who register for courses will be governed by the college catalog covering the semester in which they re-enroll.

The AFA degree in Music Education is intended for students who plan to major in music for their baccalaureate degree and incorporate instrumental or vocal performance into their career choice. Completion of the AFA degree does not fulfill the requirements of the Illinois General Education Core Curriculum. Therefore, students will need to fulfill the general education requirements of the school to which they transfer. Students may be required to demonstrate skill level through auditions and placement testing at the school to which they transfer. A bachelor's degree may also require competency in a foreign language at some colleges and universities.

It is important to meet with an advisor to update your educational plan. Please check the courses you complete each term to assist you in this process.

Associate in Fine Arts Degree in Music Education continues on next page

Associate in Fine Arts Degree in Music Education - also see preceding page.

Communication - 9 credit hours

Effective with freshmen entering in summer 1999, a grade of C or better will be required for satisfactory completion of the Communication writing requirement of the IAI.

- ☐ ENG 121 English Composition I (3) **C1 900**
- ☐ ENG 122 English Composition II (3) **C1 901 R**

or

- ☐ ENG 126 Advanced Composition:Scientific and Technical Communications (3) **C1 901 R**

and

- ☐ SPE 121 Fundamentals of Speech (3) **C2 900**

Mathematics - 3 credit hours

- ☐ MTH 127 Finite Mathematics I (3) **M1 906**
- ☐ MTH 141 Quantitative Literacy (3) **M1 901**
- ☐ MTH 145 Calculus and Analytic Geometry I (5) **M1 900**
- ☐ MTH 146 Calculus and Analytic Geometry II (4) **M1 900**
- ☐ MTH 221 Mathematics for Elementary Teaching II (3) **M1 903**
- ☐ MTH 222 Elementary Statistics (4) **M1 902**
- ☐ MTH 224 Introduction to Mathematical Analysis (4) **M1 900**
- ☐ MTH 244 Discrete Mathematics (3) **M1 905**
- ☐ MTH 246 Calculus and Analytic Geometry III (4) **M1 900**

Physical and Life Sciences -7 credit hours

- One course must be selected from Physical Science and one course from Life Science
- At least one course must be a laboratory science course (LAB).

Physical Science

- ☐ AST 121 (LAB) Introduction to Astronomy (4) **P1 906L**
- ☐ CHM 120 (LAB) Chemical Concepts (4) **P1 902L**
- ☐ CHM 121 (LAB) General Chemistry I (5) **P1 902L**
- ☐ GEG 121 Physical Geography (3) **P1 909**
- ☐ GEO 120 Earth Science (4) **P1 905**
- ☐ GEO 121 (LAB) Physical Geology (4) **P1 907L**
- ☐ GEO 124 Oceanography (3) **P1 905**
- ☐ GEO 224 Environmental Geology (3) **P1 908**
- ☐ PHY 120 (LAB) Practical Aspects of Physics (4) **P1 901L**
- ☐ PHY 121 (LAB) General Physics I (5) **P1 900L**
- ☐ PHY 123 (LAB) Physics for Science and Engineers (5) **P2 900L**

Life Science

- ☐ BIO 120 (LAB) Environmental Biology (4) **L1 905L**
- ☐ BIO 121 (LAB) General Biology I (4) **L1 900L**
- ☐ BIO 127 Introduction to Evolution (3) **L1 907**

Social and Behavioral Sciences - 6 credit hours

- Must choose from two disciplines (prefixes)

- ☐ HST 221 United States History to 1876 (3) **S2 900**
- ☐ HST 222 United States History 1876 to Present (3) **S2 901**
- ☐ PSC 121 American National Politics (3) **S5 900**

Health/Physical Development - 2 credit hours

- ☐ PED 140 Contemporary Health Issues (2)
- ☐ PED 141 Theory and Practice of Fitness (2)

Additional College AFA Degree Requirements

Core Music - 19 credit hours

- ☐ MUS 128 Theory of Music I (4)
- ☐ MUS 129 Theory of Music II (4)
- ☐ MUS 224 Music Literature (3) **F1 902**
- ☐ MUS 228 Theory of Music III (4)
- ☐ MUS 229 Theory of Music IV (4)

Electives - 16 credit hours

Choose 4 credit hours from below — Keyboard Skills

- ☐ MUS 143* Applied Music -Piano I (1-2)
- ☐ MUS 144* Applied Music - Jazz Piano I (1-2)
- ☐ MUS 145 Piano Class I (1)
- ☐ MUS 146 Piano Class II (1)
- ☐ MUS 245 Piano Class III (1)
- ☐ MUS 246 Piano Class IV (1)

Choose 4 credit hours from below

- ☐ MUS 120* Vocal Ensembles (1)
- ☐ MUS 123* Wind Ensemble (1)
- ☐ MUS 223* Jazz Ensemble (1)

Associate in Fine Arts Degree in Music Education continues on next page

Associate in Fine Arts Degree in Music Education - also see preceding page.

Choose 4 credit hours from the same 100 level course and 4 credit hours from the same 200 level course. All 8 credit hours must be taken in voice or in one major instrument.

- ☐ MUS 141* Applied Music Voice I (1-2)
- ☐ MUS 143* Applied Music Instrumental (1-2)
- ☐ MUS 160-
  MUS 188* Applied Music Instrumental (1-2)
- ☐ MUS 241* Applied Music Voice (1-2)
- ☐ MUS 243* Applied Music Instrumental (1-2)
- ☐ MUS 244* Applied Music Instrumental (1-2)
- ☐ MUS 260-
  MUS 288* Applied Music Instrumental (1-2)

* Repeatable up to four credit hours.

NOTES:

Total Degree Requirements: 62 credit hours

Other Graduation Requirements:

- ☐ Constitution Requirement (recommended methods: Illinois high school transcript showing a graduation date of 1953 or later,PSC 121, HST 221, or proficiency exam)
- ☐ Cumulative CLC GPA of 2.00 or higher
- ☐ Minimum of 15 of last 30 hours at CLC
- ☐ Petition to Graduate available in Admissions and Records.

Associate in Fine Arts Degree in Music Performance

Students may obtain an Associate in Fine Arts degree in Music Performance by successfully completing the 63 to 67 credits outlined below and by meeting the graduation requirements listed on page 46.

Students who have not enrolled in any course listed in the CLC class schedule for at least two years will be designated as ***inactive***. Inactive students who register for courses will be governed by the college catalog covering the semester in which they re-enroll.

The AFA degree in Music Performance is intended for students who plan to major in music for their baccalaureate degree and who incorporate instrumental or vocal performance into their career choice. Completion of the AFA degree does not fulfill the requirements of the Illinois General Education Core Curriculum. Students must fulfill the general education requirements of the school to which they transfer. Students may be required to demonstrate skill level through auditions and placement tests at the school to which they transfer. A bachelor's degree may also require competency in a foreign language at some colleges and universities.

It is important to meet with an advisor to update your educational plan. Please check the courses you complete each term to assist you in this process.

Communication - 9 credit hours

Effective with freshmen entering in summer 1999, a grade of C or better will be required for satisfactory completion of the Communication writing requirement of the IAI.

- ☐ ENG 121 English Composition I (3) **C1 900**
- ☐ ENG 122 English Composition II (3) **C1 901 R**

or

- ☐ ENG 126 Advanced Composition:Scientific and Technical Communications (3) **C1 901 R**

and

- ☐ SPE 121 Fundamentals of Speech (3) **C2 900**

Mathematics - 3-4 credit hours

- ☐ MTH 127 Finite Mathematics I (3) **M1 906**
- ☐ MTH 145 Calculus and Analytic Geometry I (5) **M1 900**
- ☐ MTH 146 Calculus and Analytic Geometry II (4) **M1 900**
- ☐ MTH 221 Mathematics for Elementary Teaching II (3) **M1 903**

Mathematics and Associate in Fine Arts Degree in Music Performance continues on next page

Associate in Fine Arts Degree in Music Performance - also see preceding page.

- ☐ MTH 222 Elementary Statistics (4) **M1 902**
- ☐ MTH 224 Introduction to Mathematical Analysis (4) **M1 900**
- ☐ MTH 244 Discrete Mathematics (3) **M1 905**
- ☐ MTH 246 Calculus and Analytic Geometry III (4) **M1 900**

Humanities and Fine Arts - 6-7 credit hours

- At least one course must be selected from Humanities and one course from Fine Arts.
- See also International/Multicultural Education requirement on page 61.

Humanities

- ☐ ARA 222 Intermediate Modern Standard Arabic II (4) **H1 900**
- ☐ CHI 222 Intermediate Chinese II (4) **H1 900**
- ☐ ENG 129 Women In Literature (3) **H3 911D**
- ☐ ENG 223 Survey of Major American Writers (3) **H3 914**
- ☐ ENG 225 Major Trends English Literature (3) **H3 912**
- ☐ ENG 226 Modern English Literature (3) **H3 913**
- ☐ ENG 227 Introduction to Shakespeare (3) **H3 905**
- ☐ ENG 228 World Literature (3) **H3 906**
- ☐ ENG 229 20th Century American Literature (3) **H3 915**
- ☐ ENG 241 Introduction to Poetry (3) **H3 903**
- ☐ ENG 243 Introduction to Fiction (3) **H3 901**
- ☐ ENG 244 Mythology and Fairy Tales (3) **H9 901**
- ☐ ENG 246 Latin American Writers (3) **H3 908N**
- ☐ ENG 247 International Women Writers (3) **H3 911D**
- ☐ FRN 222 Intermediate French II (4) **H1 900**
- ☐ FRN 223 French Civilization I (3) **H1 900**
- ☐ FRN 224 French Civilization II (3) **H1 900**
- ☐ GER 222 Intermediate German II (4) **H1 900**
- ☐ GER 223 German Civilization I (3) **H1 900**
- ☐ GER 224 German Civilization II (4) **H1 900**
- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 127 Critical Thinking (3) **H4 906**
- ☐ HUM 128 Introduction to Mid-Eastern Civilizations (3) **H2 903 N**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 226 Women and the Arts (3) **HF 907D**
- ☐ ITL 222 Intermediate Italian II (4) **H1 900**
- ☐ ITL 223 Italian Civilization I (4) **H1 900**
- ☐ ITL 224 Italian Civilization II (4) **H1 900**
- ☐ JPN 222 Intermediate Japanese II (4) **H1 900**
- ☐ PHI 121 Introduction to Philosophy (3) **H4 900**
- ☐ PHI 122 Logic (3) **H4 906**
- ☐ PHI 123 Philosophy of Religion (3) **H4 905**
- ☐ PHI 125 Introduction to Ethics (3) **H4 904**
- ☐ RUS 222 Intermediate Russian II (4) **H1 900**
- ☐ SPA 222 Intermediate Spanish II (3) **H1 900**
- ☐ SPA 223 Spanish Civilization I (3) **H1 900**
- ☐ SPA 224 Spanish Civilization II (3) **H1 900**

Fine Arts

- ☐ ART 121 Introduction to Art (3) **F2 900**
- ☐ ART 240 History of Art I (3) **F2 901**
- ☐ ART 241 History of Art II (3) **F2 902**
- ☐ ART 242 History of Art III (3) **F2 902**
- ☐ ART 260 History of Photography (3) **F2 904**
- ☐ HUM 121 Introduction to Humanities I (3) **HF 902**
- ☐ HUM 122 Introduction to Humanities II (3) **HF 903**
- ☐ HUM 123 Introduction to Film (3) **F2 905**
- ☐ HUM 125 Introduction to Fine Arts I (3) **F2 900**
- ☐ HUM 126 Introduction to the Performing Arts (3) **F9 900**
- ☐ HUM 221 American Decades (3) **HF 906 D**
- ☐ HUM 222 Film and Society (3) **F2 905**
- ☐ HUM 225 The Art of Dance (3) **F1 906**
- ☐ HUM 226 Women and the Arts (3) **HF 907 D**
- ☐ THE 121 Introduction to Theater I (3) **F1 907**

Physical and Life Sciences -7-8 credit hours

- One course must be selected from Physical Science and one course from Life Science
- At least one course must be a laboratory science course (LAB).

Physical Science

- ☐ AST 121 (LAB) Introduction to Astronomy (4) **P1 906L**
- ☐ CHM 120 (LAB) Chemical Concepts (4) **P1 902L**
- ☐ CHM 121 (LAB) General Chemistry I (5) **P1 902L**
- ☐ GEG 121 Physical Geography (3) **P1 909**
- ☐ GEO 120 Earth Science (4) **P1 905**
- ☐ GEO 121 (LAB) Physical Geology (4) **P1 907L**
- ☐ GEO 124 Oceanography (3) **P1 905**
- ☐ GEO 224 Environmental Geology (3) **P1 908**
- ☐ PHY 120 (LAB) Practical Aspects of Physics (4) **P1 901L**
- ☐ PHY 121 (LAB) General Physics I (5) **P1 900L**
- ☐ PHY 123 (LAB) Physics for Science and Engineers (5) **P2 900L**

Life Science

- ☐ BIO 120 (LAB) Environmental Biology (4) **L1 905L**
- ☐ BIO 121 (LAB) General Biology I (4) **L1 900L**
- ☐ BIO 127 Introduction to Evolution (3) **L1 907**

Social and Behavioral Sciences - 3-4 credit hours

- Only one discipline is necessary.
- See also International/Multicultural Education requirement on page 61.

- ☐ ANT 121 Introduction to Anthropology (3) **S1 900N**
- ☐ ANT 221 Cultural Anthropology (3) **S1 901N**
- ☐ ANT 224 Introduction to Archaeology (3) **S1 903**
- ☐ ECO 221 Principles of Macroeconomics (3) **S3 901**
- ☐ ECO 222 Principles of Microeconomics (3) **S3 902**

Social and Behavioral Science and Associate in Fine Arts Degree in Music Performance continues on next page

Associate in Fine Arts Degree in Music Performance - also see preceding page.

- ☐ GEG 122 Cultural Geography (3) **S4 900 N**
- ☐ GEG 123 World Regional Geography (3) **S4 900N**
- ☐ HST 121 History of Western Civilization I (3) **S2 902**
- ☐ HST 122 History of Western Civilization II (3) **S2 903**
- ☐ HST 126 History of Contemporary Non-Western Civilization (3) **S2 905N**
- ☐ HST 127 History of Chinese Culture and Society (3) **S2 914N**
- ☐ HST 221 United States History to 1876 (3) **S2 900**
- ☐ HST 222 United States History 1876 to Present (3) **S2 901**
- ☐ PSC 121 American National Politics (3) **S5 900**
- ☐ PSC 122 State and Local Politics (3) **S5 902**
- ☐ PSC 221 Comparative Political Systems (3) **S5 905**
- ☐ PSY 121 Introduction to Psychology (3) **S6 900**
- ☐ PSY 222 Child Growth and Development (3) **S6 903**
- ☐ PSY 225 Social Psychology (3) **S8 900**
- ☐ SOC 121 Introduction to Sociology (3) **S7 900**
- ☐ SOC 222 Social Problems (3) **S7 901**
- ☐ SOC 224 Sociology of the Family (3) **S7 902**

Additional College AFA Degree Requirements

Includes one course in International/Multicultural Education taken from the list on page 61.

Core Music - 19 credit hours

- ☐ MUS 128 Theory of Music I (4)
- ☐ MUS 129 Theory of Music II (4)
- ☐ MUS 224 Music Literature (3) **F1 902**
- ☐ MUS 228 Theory of Music III (4)
- ☐ MUS 229 Theory of Music IV (4)

Electives - 16 credit hours

Choose 4 credit hours from below — Keyboard Skills

- ☐ MUS 143* Applied Music - Piano I (1-2)
- ☐ MUS 144* Applied Music - Jazz Piano I (1-2)
- ☐ MUS 145 Piano Class I (1)
- ☐ MUS 146 Piano Class II (1)
- ☐ MUS 245 Piano Class III (1)
- ☐ MUS 246 Piano Class IV (1)

Choose 4 credit hours from below

- ☐ MUS 120* Vocal Ensembles (1)
- ☐ MUS 123* Wind Ensemble (1)
- ☐ MUS 223* Jazz Ensemble (1)

Choose 4 credit hours from the same 100 level course and 4 credit hours from the same 200 level course. All 8 credit hours must be taken in voice or in one major instrument.

- ☐ MUS 141* Applied Music Voice I (1-2)
- ☐ MUS 143* Applied Music Piano I (1-2)
- ☐ MUS 144* Applied Music Jazz Piano I (1-2)
- ☐ MUS 160-MUS 188* Applied Music Instrumental (1-2)
- ☐ MUS 241* Applied Music Voice II (1-2)
- ☐ MUS 243* Applied Music Piano II (1-2)
- ☐ MUS 244 Applied Music Jazz Piano II (1-2)
- ☐ MUS 260-MUS 288* Applied Music Instrumental (1-2)

* Repeatable up to four credit hours

Notes:

Total Degree Requirements: 63-67 credit hours

Other Graduation Requirements:

- ☐ Constitution Requirement (recommended methods: Illinois high school transcript showing a graduation date of 1953 or later,PSC 121, HST 221, or proficiency exam)
- ☐ Cumulative CLC GPA of 2.00 or higher
- ☐ Minimum of 15 of last 30 hours at CLC
- ☐ Petition to Graduate available in Admissions and Records

A.A., A.S., A.F.A., and A.E.S. Degrees International/Multicultural Education Requirement

CLC offers curricula and programs that develop an appreciation for the diversity of world cultures and the importance of international and multicultural perspectives. Students are strongly encouraged to select a course(s) that exposes them to a culture(s) other than their own. One course must be taken from the following list

- ☐ ANT 121 Introduction to Anthropology (3)
- ☐ ANT 221 Cultural Anthropology (3)
- ☐ ARA (ANY) Arabic Course (4)
- ☐ ART 240 History of Art I (3)
- ☐ ART 241 History of Art II (3)
- ☐ ART 242 History of Art III (3)
- ☐ BUS 270 Introduction to International Business (3)

Continued on next page.

- ☐ CHI (ANY) Any Chinese Course (4)
- ☐ ECO 225 Comparative Economic Systems (3)
- ☐ ENG 128 Linguistics and Society (3)
- ☐ ENG 129 Women in Literature (3)
- ☐ ENG 228 World Literature (3)
- ☐ ENG 244 Mythology and Fairy Tales (3)
- ☐ ENG 246 Latin American Writers (3)
- ☐ ENG 247 International Women Writers (3)
- ☐ ENG 263 Early American Minority Writers (3)
- ☐ ENG 264 Modern American Minority Writers (3)
- ☐ FRN (ANY) Any French Course (3-4)
- ☐ GEG 122 Cultural Geography (3)
- ☐ GEG 123 World Regional Geography (3)
- ☐ GEG 223 Geography of Latin America (3)
- ☐ GER (ANY) Any German Course (3-4)
- ☐ HST 121 History of Western Civilization I (3)
- ☐ HST 122 History of Western Civilization II (3)
- ☐ HST 123 Modern Europe I (3)
- ☐ HST 124 Modern Europe II (3)
- ☐ HST 126 History of Contemp. Non-Western Civilization (3)
- ☐ HST 127 History of Chinese Culture and Society (3)
- ☐ HST 240 Afro-American History I (3)
- ☐ HST 241 Afro-American History II (3)
- ☐ HUM 121 Introduction to Humanities I (3)
- ☐ HUM 122 Introduction to Humanities II (3)
- ☐ HUM 124 International and Regional Studies in the Humanities (1-4)
- ☐ HUM 128 Introduction to Mid-Eastern Civilizations (3)
- ☐ HUM 221 American Decades (3)
- ☐ HUM 226 Women and the Arts (3)
- ☐ ITL (ANY) Any Italian Course (4)
- ☐ JPN (ANY) Any Japanese Course (4)
- ☐ PHI 123 Philosophy of Religion (3)
- ☐ PHI 125 Introduction to Ethics (3)
- ☐ PHI 129 Philosophical Issues in Contemporary Feminism (3)
- ☐ PSC 221 Comparative Political Systems (3)
- ☐ PSC 222 International Relations (3)
- ☐ RUS (ANY) Any Russian Course (4 hours)
- ☐ SPA (ANY) Any Spanish Course (3-4 hours)
- ☐ SPE 127 Intercultural Communication (3)
- ☐ SSI 124 International Studies in Social Science (3)

Career Programs Degree Requirements

General Requirements for the Associate in Applied Science Degree

1. Completion of at least 15 of the last 30 semester hours of instruction while in attendance at the College of Lake County. (Does not include credit earned by examination or transfer.) Servicemembers and their spouses enrolled in the Servicemember's Opportunity College Program and Navy personnel enrolled in the Navy Campus for Achievement Program may meet the graduation requirements regarding semester hours at the college by completion of a minimum of 15 semester hours if his or her active duty assignment takes him/her to a base preventing his or her attendance in College of Lake County courses.

2. The maintenance of a C (2.0) average for all work at CLC used to compute the grade point average.

3. Compliance with the requirement regarding the Constitution Examination (Senate Bill 195 of the 68th General Assembly of the State of Illinois) by any one of the following means:

   a. Passing the College of Lake County proficiency examination covering the Constitution of the United States and the State of Illinois, and the proper use and display of the American flag
   b. Passing Political Science 121 or History 221 at CLC
   c. Presenting an official Illinois high school transcript which clearly gives evidence that this requirement was satisfied for high school graduation
   d. Completing the requirement at another institution of higher education in the State of Illinois

4. The satisfactory completion of the General Education Requirements for the appropriate degree

5. The following courses cannot be used to satisfy degree requirements and do not count in the grade point average

   a. Course with a middle digit of 0, (ENG 108, ENG 109 and MTH 101).
   b. Adult Education courses with a department prefix of ABE, ADE, ESL, GED, IPT or VST
   c. General Studies courses

6. Specific electives and total hours vary by program. See program descriptions, pages 85-130.

7. Students who have not enrolled in any course listed in the CLC class schedule for at least two years will be designated as ***inactive***. Inactive students who register for courses will be governed by the college catalog covering the semester in which they re-enroll.

General Education Requirements for the Associate in Applied Science Degree

1. Communication Arts 6
   a. Choose either ENG 120 or ENG 121 ***and***
   b. Choose one of the following speech courses: SPE 111, SPE 121, SPE 122, SPE 123, or SPE 128. Check the requirements of specific programs to determine which speech course you must take.

2. Social and Behavioral Science 6
   Anthropology, Economics, Education, Geography (except GEG 121), History, Political Science, Psychology, Social Science, Sociology

3. Science and/or Mathematics 3
   Biology, Business Mathematics (BSS 122), EIT 110, Chemistry, Geography (GEG 121), Geology, Mathematics, Physics

4. Humanities and Fine Arts 3
   Architecture (ARC 228), Art, Humanities, Music, Theatre, Chinese, English (except ENG 122, 123, 124, and 126), Dance, Arabic, French, German, Italian, Japanese, Philosophy, Russian, Spanish

5. No courses may be used to satisfy more than one General Education Requirement.

Certificates

The College of Lake County awards three types of certificates.

Career Certificates

Certificates in career areas are programs which require less than two years of full-time study. A certificate program is generally distinguished from a degree program by having fewer general education requirements. In order to determine the specific requirement of a certificate program, check the list of certificate programs that is included with the Career Program Descriptions which begin on page 85 in this catalog. Candidates for certificates must submit a completed Petition for Graduation.

All students must meet the following general graduation requirements to earn a career certificate from the college.

1. The satisfactory completion of the hours and courses required for the certificate
2. For certificates of 30 semester hours or less, students must complete at least one half of the hours required by the certificate while in attendance at the College of Lake County. For certificates in excess of 30 semester hours, students must complete at least 15 hours while in attendance at the College of Lake County (not including credit earned by examination or transfer). Servicemembers and their spouses enrolled in the Servicemember's Opportunity College Program and Navy personnel enrolled in the Navy Campus for Achievement Program, may meet the graduation requirements regarding semester hours at the college by completion of a minimum of 15 semester hours if his or her active duty assignment takes him or her to a base preventing his or her attendance at College of Lake County courses.
3. The maintenance of a C (2.0) average for all work at CLC used to compute the grade point average.

General Studies Certificates

General studies certificates are awarded to students who successfully complete 30 semester hours in a program which has been designed by the individual student and which has been ***prearranged*** with the Dean of Adult and Community Education. The program may consist entirely of general studies courses or it may combine general studies courses with appropriate career and/or college transfer courses. Candidates for certificates must submit a completed Petition for Graduation. Contact the Office of Adult and Community Education at extension 2402 for more information.

Class Certificates

A class certificate may be awarded upon completion of a course which fulfills a special educational objective within the adult and continuing education area. Courses for which certificates are awarded may or may not carry academic credit.

Associate in Arts, Associate in Science

Associate in Engineering Science

Associate in Fine Arts

Programs of Study

ACCOUNTING

(Associate in Arts)
Plan 13AB
Business Division, Room A143, (847) 543-2041

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

In addition to the following courses many four-year schools accept transfer of ACC 214 Cost Accounting.

First Semester

ENG	121	English Composition I	3
PSY	121	Introduction to Psychology	3
BUS	121	Introduction to Business	3
SPE	121	Fundamentals of Speech	3
		Mathematics Elective[2]	4
			16

Second Semester

ENG	122	English Composition II **or**	
ENG	126	Advanced Composition	3
CIS	120	Introduction to Computers[4]	3
		MTH Elective[2]	3-4
		Humanities & Fine Arts Elective[1]	3
		Physical & Life Science Elective (lab)[3]	4-5
			16-18

Third Semester

ACC	121	Financial Accounting	4
ECO	221	Principles of Economics I	3
		Humanities & Fine Arts Elective	3
		MTH Elective[2]	4
			14

Fourth Semester

ACC	122	Managerial Accounting	4
ECO	222	Principles of Economics II	3
BUS	221	Business Law I	3
		Physical & Life Science Elective (non lab)[3]	3
		Humanities & Fine Arts Elective	3
			16

[1] PHI 122 or 125 or HUM 127 recommended to fulfill one humanities elective.

[2] Most Illinois Universities and colleges and UW Parkside required MTH 222 and MTH 224 or MTH 145. MTH 122 is a prerequisite for MTH 224. Information regarding mathematics requirements at other schools is available in Counseling.

[3] Two science courses, one life science and one physical science, one of which must include lab experience. A minimum of 7 hours are required.

[4] Some transfer schools require a computer language course, such as MCS 140. A few schools now prefer CIS 119.

For more information on this course of study, students may contact either the division office listed or any of the following full-time faculty members.

Name	Office	Phone Number
Jay Chittal	A138	(847) 543-2520
Scott Steinkamp	A134	(847) 543-2524
Mary Zenner	A138	(847) 543-2522

ANTHROPOLOGY

(Associate in Arts)
Plan 13AB
Social Science Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA or AS degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ANT	121	Introduction to Anthropology	3
BIO	120	Environmental Biology **or**	
BIO	121	General Biology I	4
ENG	121	English Composition I	3
HST	121	History of Western Civilization I	3
SOC	121	Introduction to Sociology	3
			16

Second Semester:

ANT	221	Cultural Anthropology	3
ENG	122	English Composition II	3
HST	122	History of Western Civilization II	3
MTH	141	Quantitative Literacy	3
PHI	121	Introduction to Philosophy	3
			15

Third Semester:

ART	240	History of Art I	3
GEG	121	Physical Geography	3
GEG	122	Cultural Geography	3
PSY	121	Introduction to Psychology	3
		Humanities and Fine Arts	3
			15

Fourth Semester:

ANT	224	Introduction to Archaeology	3
GEG	123	World Regional Geography	3
SPE	121	Fundamentals of Speech	3
		Humanities and Fine Arts	3
		Electives	3
			15

Math requirements vary at 4-year institutions

The BA degree at many 4-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school you need only one more year of advanced study at CLC. Students who have completed 4 years of foreign language at the high school level need not take any additional foreign language

Faculty who teach in this subject area are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
Wendy Brown	A254	(847) 543-2941
Jerry Hanson	A251	(847) 543-2931
Noel Stirrat	A251	(847) 543-2942

ART

(Associate in Arts)
Plan 13AB
Humanities Division, Room B237, (847) 543-2040

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I[1]	3
ART	124	Basic Drawing	3
ART	122	Basic Color and Design	3
ART	240	History of Art I[1]	3
		Physical & Life Sciences Lab Elective[2]	4
			16

Second Semester

ENG	122	English Composition II[1]	3
ART	123	Color and Design Techniques	3
ART	127	Intermediate Drawing	3
ART	241	Art History II	3
		Social & Behavioral Sciences Elective[1]	3
			15

Third Semester

SPE	121	Fundamentals of Speech[1]	3
ART	225	Figure Drawing	3
ART	242	Art History III	3
		Mathematics Elective	3
		Social & Behavioral Sciences Elective	3
			15

Fourth Semester

ART	221	Advanced Design	3
		Humanities & Fine Arts Elective[3]	6
		Physical & Life Sciences Lab Elective[2]	3
		Social & Behavioral Sciences Elective	3
		Electives	2
			17

[1] Meets general education core requirements
[2] Two science courses, one physical science, one life science, one must include lab experience
[3] May also satisfy International Education requirements

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty members.

Name	Office	Phone Number
Reginald Coleman	D112	(847) 543-2964
Terry Dixon	B250	(847) 543-2234
Anthony Holmes	L035	(847) 543-2437
Robert Lossmann	D110	(847) 543-2436
Joy Rosenthal	D113	(847) 543-2962

BIOLOGICAL SCIENCES (BOTANY, ECOLOGY, MICROBIOLOGY, WILDLIFE MANAGEMENT & ZOOLOGY)

(Associate in Science)
Plan 11AB
Biological and Health Sciences Division
Room C-140, (847) 543-2042

The following courses are ***recommended*** for students who intend to complete the A.S. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. ***Students should choose electives only after consulting with a department advisor.*** All course prerequisites must be met.

This sequence delays physics until the junior year.

First Semester

BIO	121	General Biology I	4
CHM	121	General Chemistry I	5
ENG	121	English Composition I	3
		Humanities Elective	3
		Social & Behavioral Sciences Elective	3
			18

Second Semester

BIO	122	General Biology II	4
CHM	123	General Chemistry II	5
ENG	122	English Composition II **or**	
ENG	126	Advanced Composition	3
MTH	123	Trigonometry	3
		Social & Behavioral Sciences Elective	3
			18

Third Semester

BIO	222	General Botany	4
CHM	222	Organic Chemistry I	5
MTH	145	Calculus & Analytic Geometry I	5
		Fine Arts Elective	3
			17

Fourth Semester

BIO	221	General Zoology	4
CHM	223	Organic Chemistry II	5
SPE	121	Fundamentals of Speech	3
		Social & Behavioral Sciences Elective	3
		Humanities *or* Fine Arts Elective	3
			18

For more information on this course of study, students may contact either the division office listed or any of the following faculty members.

Name	Office	Phone Number
Linda Curtis	C145	(847) 543-2882
Scott Hickman	C147	(847) 543-2884
Jerry Hinkley	C145	(847) 543-2322
Richard Killen	C148	(847) 543-2328
Terry Larson	C148	(847) 543-2885
John Mathwig	C144	(847) 543-2324
Richard Meginniss	C147	(847) 543-2326
Cheena Wade	C146	(847) 543-2883

BUSINESS ADMINISTRATION

(Associate in Arts)
Plan 13AB
Business Division, Room A143, (847) 543-2041

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
PSY	121	Introduction to Psychology	3
BUS	121	Introduction to Business	3
SPE	121	Fundamentals of Speech	3
		Mathematics Elective[2]	4
			16

Second Semester

ENG	122	English Composition II **or**	
ENG	126	Advanced Composition	3
CIS	120	Introduction to Computers[4]	3
		Mathematics Elective[2]	3-4
		Humanities & Fine Arts Elective[1]	3
		Physical or Life Science Elective (lab)[3]	4-5
			16-18

Third Semester

ACC	121	Financial Accounting	4
ECO	221	Principles of Economics I	3
		Humanities & Fine Arts Elective[1]	3
		Mathematics Elective	4
			14

Fourth Semester

ACC	122	Managerial Accounting	4
ECO	222	Principles of Economics II	3
BUS	221	Business Law I	3
		Physical or Life Science Elective (non-lab)[3]	3-4
		Humanities & Fine Arts Elective[1]	3
			16-17

[1] PHI 122 or 125 or HUM 127 recommended to fulfill one humanities elective.

[2] Most Illinois Universities and colleges and UW Parkside required MTH 222 and MTH 224 or MTH 145. MTH 122 is a prerequisite for MTH 224. Information regarding mathematics requirements at other schools is available in Counseling

[3] Two science courses, one life science, one physical science, one of which must include lab experience. A minimum of 7 hours is required.

[4] Some transfer schools require a computer language course, such as MCS 140. A few schools now prefer CIS 119.

For more information on this course of study, students may contact either the division office listed or any of the following full-time faculty members.

Name	Office	Phone Number
Litsa Press	A137	(847) 543-2921
James Reinemann	A135	(847) 543-2523
Ellen Rubert	A137	(847) 543-2821
James Paradiso	A139	(847) 543-2525

CHEMISTRY

(Associate in Science)
Plan 11AB
Biological and Health Sciences, Room C140,
(847) 543-2042

The following courses are ***recommended*** for students who intend to complete the A.S. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

CHM	121	General Chemistry I	5
ENG	121	English Composition I	3
MTH	145	Calculus and Analytic Geometry I	5
		Humanities Elective	3
			16

Second Semester

CHM	123	General Chemistry II	5
ENG	122	English Composition II **or**	
ENG	126	Advanced Composition	3
MTH	146	Calculus and Analytic Geometry II[1]	4
		Social & Behavioral Sciences Elective	3
		Fine Arts Elective	3
			18

Summer Session

BIO	121	General Biology I ***or***	
BIO	127	Introduction to Evolution	3-4
		Social & Behavioral Sciences Elective	3
			6-7

Third Semester

CHM	221	Analytical Chemistry	5
CHM	222	Organic Chemistry I	5
PHY	121	General Physics I	5
SPE	121	Fundamentals of Speech	3
			18

Fourth Semester

CHM	223	Organic Chemistry II	5
PHY	122	General Physics II	5
		Social & Behavioral Sciences Elective	3
		Humanities ***or*** Fine Arts Elective	3
			16

[1] A third semester of calculus may be required by some institutions.

For more information on this course of study, students may contact either the division office listed or any of the following faculty members.

Name	Office	Phone Number
Don Davis	B234	(847) 543-2309
Darryl Johnson	B234	(847) 543-2877
Anne Loeb	B225	(847) 543-2308
Mary Urban	B235	(847) 543-2876

COMPUTER SCIENCE

(Associate in Science)
Plan 11AB
Engineering, Mathematics and Physical Science Division
Room B162, (847) 543-2044

The following courses are ***recommended*** for students who intend to complete the A.S. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Pay particular attention to the IAI general education requirements and stipulations. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

For those transferring to Northern Illinois University, Southern Illinois University and the University of Illinois a strong foreign language component is also required.

First Semester

MTH	145	Calculus and Analytic Geometry I	5
MCS	140	Computer Programming I ***or***	
MCS	141	Computer Science I	3-4
ENG	121	English Composition I	3
		Physical & Life Sciences Lab Elective[1]	4
			15-16

Second Semester

MTH	146	Calculus and Analytic Geometry II	4
MCS	142	Computer Programming II	3
ENG	122	English Composition II **or**	
		ENG 126	3
		Social & Behavioral Science	3
		Physical & Life Sciences Lab Elective[1]	4
			17

Third Semester

MTH	246	Calculus and Analytic Geometry III	4
MTH	222	Elementarty Statistics ***or***	
MTH	127	Finite Mathematics	3-4
SPE	121	Fundamentals of Speech	3
PHI	122	Logic	3
		Social & Behavioral Sciences Elective	3
			16-17

Fourth Semester

MTH	244	Discrete Mathematics	3
MCS	240	Introduction to Computer Systems	3
		Humanities & Fine Arts Elective[2]	6
		Social & Behavioral Sciences Elective	3
			15

Note: Some transfer institutions are accepting MCS 240, Introduction to Computer Systems, as an elective course. An additional assembler course at the transfer institution may be necessary in order for you to complete your baccalaureate program.

Additional Note: Some students may require pre-calculus course work. As a result, "First Semester" in this program may not correspond to a student's first semester in college.

[1] Two science courses, one Life Science, one Physical Science, both courses must include a lab.

[2] At least one course must be a Fine Arts course.

For more information on this course of study students may contact either the division office listed or any of the following full-time faculty members.

Names	Office	Phone Number
Marvin Johnson	B133	(847) 543-2744
Wing Park	B135	(847) 543-2493
Scott Reed	B136	(847) 543-2909

CRIMINAL JUSTICE

(Associate in Arts)
Plan 13AB
Social Science Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA or AS degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
CRJ	121	Introduction to Criminal Justice	3
SOC	121	Introduction to Sociology	3
PHI	125	Introduction to Ethics	3
MTH	222	Elementary Statistics	4
			16

Second Semester

ENG	122	English Composition II	3
CRJ	123	Introduction to Criminology	3
GEG	121	Physical Geography	3
SPE	121	Fundamentals of Speech	3
		Humanities and Fine Arts	3
			15

Third Semester

CRJ	229	Juvenile Delinquency	3
BIO	120	Environmental Biology	4
PSC	121	American National Politics	3
HST	121	History of Western Civilization	3
		Humanities and Fine Arts	3
			16

Fourth Semester

PSY	121	Introduction to Psychology	3
CRJ	124	Penology and Corrections	3
CRJ	221	Criminal Law	3
ANT	221	Cultural Anthropology	3
		Electives	3
			15

Math requirements vary at 4-year institutions

The BA degree at many four-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school, you need only one more year of advanced study at CLC. Students who have completed four years of foreign language at the high school level need not take any additional foreign language.

Faculty who teach in this subject area are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
Roger Voltz	D118	(847) 543-2468
Thomas Arnold	D118	(847) 543-2944

EARLY CHILDHOOD EDUCATION TRANSFER DEGREE

(Associate in Arts)
Plan 13AB
Social Science Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met. In addition, a person with this degree would be considered qualified by the Illinois Department of Children and Family Services to be a director of a child care center.

First Semester

ENG	121	English Composition I	3
PSY	121	Introduction to Psychology	3
BIO	120	Environmental Biology ***or***	
BIO	121	General Biology I	4
PSC	121	American National Politics	3
EDU	120	Observation and Guidance of Children	2
			15

Second Semester

ENG	122	English Composition II	3
MTH	121	Mathematics for Elementary Teaching I	3
PSY	222	Child Growth and Development	3
HUS	111	Health and Nutrition	3
		Humanities/Fine Arts	3
			15

Third Semester

SPE	121	Fundamentals of Speech	3
MUS	124	Introduction to Music	3
ECE	221	Principles of Early Childhood Education	3
HST	221	U. S. History to 1876 ***or***	
HST	222	U.S. History 1876 to Present	3
		Humanities/Non-Western	3
			15

Fourth Semester

EDU	222	The Exceptional Child	3
GEG	121	Physical Geography or other science	3
ECE	223	Child, Family, and Community	3
MTH	221	Mathematics for Elementary Teaching II	3
PSY	221	Educational Psychology	3
			15

Math requirements vary at 4-year institutions.

Approved Humanities/Fine Arts Non-Western Culture courses include ENG 246 and HUM 128.

Faculty are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
Carol Huntsinger	D120	(847) 543-2742

ECONOMICS

(Associate in Arts)
Plan 13AB
Social Science Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA or AS degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ECO	221	Principles of Macroeconomics	3
ENG	121	English Composition I	3
PHI	121	Introduction to Philosophy	3
MTH	127	Finite Mathematics ***or***	
MTH	145	Calculus & Analytic Geometry I1	3-5
		Elective	3
			15-17

Second Semester

ECO	222	Principles of Microeconomics	3
ENG	122	English Composition II	3
PSC	121	American National Politics	3
		Life Science (Lab)	4
		Humanities and Fine Arts	3
			16

Third Semester

SPE	121	Fundamentals of Speech	3
ECO		Economics Elective	3
		Humanities and Fine Arts	3
		Physical Science	3
		Elective	3
			15

Fourth Semester

MTH	222	Elementary Statistics	3
HST	121	History of Western Civilization I	3
SOC	121	Introduction to Sociology	3
PSC	122	State and Local Politics	3
		Electives	3
			15

Math requirements vary at 4-year institutions

The BA degree at many 4-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school you need only one more year of advanced study at CLC. Students who have completed 4 years of foreign language at the high school level need not take any additional foreign language.

Faculty who teach in this subject area are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
Chandrea Crowe	A252	(847) 543-2539
Robert Kerr	A237	(847) 543-2533
Dale Warnke	A237	(847) 543-2943

ELEMENTARY EDUCATION

(Associate in Arts)
Plan 13AB
Social Sciences Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA or AS degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
BIO	120	Environmental Biology ***or***	
BIO	121	General Biology	4
PSC	121	American National Politics	3
PSY	121	Introduction to Psychology	3
		Humanities and Fine Arts	3
			16

Second Semester:

ENG	122	English Composition II	3
GEG	121	Physical Geography	3
MTH	121	Mathematics for Elementary Teaching I	3
EDU	221	Introduction to Teaching	3
		Humanities and Fine Arts	3
			15

Third Semester:

SPE	121	Fundamentals of Speech	3
PSY	222	Child Growth and Development	3
		Non-Western Culture Course	3
		Humanities and Fine Arts	3
		Elective	3
			15

Fourth Semester:

HST	221	U.S. History to 1876	3
PSY	221	Educational Psychology	3
EDU	222	The Exceptional Child	3
ANT	221	Cultural Anthropology	3
		Elective	3
			15

Math requirements vary at 4-year institutions.

One of the Humanities and Fine Arts Courses should be a literature course with an IAI designation of H3 900 through 908 or H3 910D through 915.

Approved non-Western Culture Courses include ENG 246, GEG 223, HST 126, HST 127, and HUM 128.

For more information on this course of study students may contact either the division office listed or one of the following full-time faculty members.

Name	Office	Phone Number
Joan Kerr	A155	(847) 543-2533

TRANSFER ENGINEERING PROGRAM

(Associate in Engineering Science)
Plan 12AB
Engineering, Mathematics and Physical Science Division, Room B162, (847) 543-2044

The College of Lake County offers a program designed to parallel the first two years of engineering programs at most universities accredited by the Accrediting Board for Engineering and Technology (ABET). Since minor differences in course requirements exist at different universities and in different engineering disciplines within the same university, students are strongly advised to meet with a faculty advisor from the engineering department and to consult the college catalog of their intended transfer institution.

The following course selections are ***recommended*** for most efficient transfer to a university with junior standing. Some variation in course selection may be advisable, depending on the intended engineering discipline and on transfer institution requirements.

First Semester

MTH	145	Calculus and Analytic Geometry I	5
CHM	121	General Chemistry I	5
EGR	121	Engineering Graphics	3
ENG	121	English Composition I	3
			16

Second Semester

MTH	146	Calculus and Analytic Geometry II	4
CHM	123	General Chemistry II	5
ENG	122	English Composition II **or**	
ENG	126	Advanced Composition	3
PHY	123	Physics for Science and Engineering	5
			17

Third Semester

MCS	140	Computer Programming I	3
PHY	124	Physics for Science and Engineering II	5
		Humanities & Fine Arts Elective	3
MTH	227	Differential Equations	3
		Elective per transfer institution requirement (e.g. MCS 142)	3
			17

Fourth Semester

MTH	246	Calculus and Analytical Geometry III	4
		Social & Behavioral Sciences Elective	3
EGR	260	Introduction to Circuit Analysis	4
EGR	221	Statics and Dynamics	5
			16

Summer Sessions (As required by Transfer Institution)

PHY	221	Physics for Science and Engineering II	4
EGR	222	Engineering Mechanics of Deformable Bodies	3
		Humanities & Fine Arts Elective or Social & Behavioral Sciences Elective	3
			10

Courses Offered in Selected Semesters Only

	Fall		Spring		Summer	
Course	Day	Night	Day	Night	Day	Night
MTH 224				X		X
MTH 227	X			X		
MTH 244			X			
MTH 246	X	X		X	X	
MCS 140	X	X	X		X	
MCS 142				X		
PHY 123	X	X	X			
PHY 124	X		X	X		
PHY 221						X
EGR 260			X			
EGR 221				X		
EGR 222						X

Night classes begin no earlier than 5:00 P.M.
Above schedule assumes sufficient enrollment.

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty members.

Name	Office	Phone Number
Jack Hudson	B117½	(847) 543-2902
Ross Lyman	A220a	(847) 543-2904

ENGLISH

(Associate in Arts)
Plan 13AB
Humanities Division, Room B237, (847) 543-2040

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
		Humanities Elective (non-ENG)	3
		Social & Behavioral Sciences Elective	3
		Math Elective	3
		Foreign Language[1]	4
			16

Second Semester

ENG	122	English Composition II	3
ENG	223	Major American Writers **or**	
ENG	225	Major English Writers	3
SPE	121	Fundamentals of Speech	3
		Social & Behavioral Sciences Elective	3
		Foreign Language[1]	4
			16

Third Semester

ENG	229	20th Century American Literature **or**	
ENG	226	Modern English Literature	3
		Fine Arts Elective (non-ENG)	3
		Physical & Life Sciences Lab Elective[2]	4
		Social & Behavioral Sciences Elective	3
		Elective	3
			16

Fourth Semester

ENG	244	Mythology & Fairy Tales **or**	
ENG	222	Creative Writing	3
ENG	228	World Literature **or**	
ENG	227	Introduction to Shakespeare	3
		Physical & Life Sciences Elective[2]	4
		Humanities & Fine Arts Elective	3
		Elective	3
			15

[1] The B.A. degree at many 4-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school you need only one more year at CLC at an advanced level. Students who have completed 4 years of foreign language at the high school level need not take any additional foreign language.

[1] One Physical science, one life science, one must include a lab.

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty members.

Name	Office	Phone Number
Theresa Aguinaldo	D116	(847) 543-2955
MaryAnn Bretzlauf	B249	(847) 543-2463
Cathy Colton	D110	(847) 543-2721
Lynne Curtis	B260	(847) 543-2558
Penne Devery	B263	(847) 543-2561
Rita Eastburg	D116	(847) 543-2743
Elizabeth Flores	B252	(847) 543-2949
Joyce Gatto	D116	(847) 543-2304
Eibhlin Glennon	P221	(847) 543-2567
Patrick Gonder	C146	(847) 543-2555
Martin Ley	B262	(847) 543-2969
George Liu	A239	(847) 543-2948
Jerry Pinkham	B251	(847) 543-2553
De Rionne Pollard	L126	(847) 543-2447
Judy Rosenberg	B252	(847) 543-2546
Paulette Roeske	B250	(847) 543-2956
Ted Schaefer	A235	(847) 543-2535
Nick Schevera	B249	(847) 543-2959
Larry Starzec	A235	(847) 543-2557
Jacinta Thomas	A240	(847) 543-2565
Diane Williams	A239	(847) 543-2364
Mary Winter	B260	(847) 543-2963

FRENCH

(Associate in Arts)
Plan 13AB
Humanities Division, Room B237, (847) 543-2040

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

FRN	121	Beginning Conversational French I **or**	
FRN	221	Intermediate French I[1]	4
ENG	121	English Composition I	3
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective	3
		(non-French) Elective	3
			16

Second Semester

FRN	122	Beginning Conversational French II **or**	
FRN	222	Intermediate French II[1]	4
ENG	122	English Composition II	3
		or ENG 126 Advanced Composition[2]	
		Social & Behavioral Sciences Elective	3
		Math Elective	3
		Humanities & Fine Arts Elective	3
			16

Third Semester

FRN	221	Intermediate French I **or**	
FRN	223	French Civilization I[3]	4
SPE	121	Fundamentals of Speech	3
		Physical & Life Sciences Lab Elective[4]	4
		Elective	3
		Elective	2
			16

Fourth Semester

FRN	222	Intermediate French II **or**	
FRN	224	French Civilization II[3]	4
		Social & Behavioral Sciences Elective	3
		Science Elective	3
		Elective	3
		Elective	3
			16

[1] Students with at least two recent years of successful high school French should enroll in FRN 221-222.
[2] Students wishing to coordinate French with Business or other technical study should opt for ENG 126.
[3] Students who have completed the intermediate courses should enroll in FRN 223-224 (French Civilization).
[4] One physical science, one life science, one must include a lab.

Faculty who teach in this subject area are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
Maria Manterola	B247	(847) 543-2291

GEOGRAPHY

(Associate in Arts)
Plan 13AB
Social Science Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA or AS degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
GEG	121	Physical Geography	3
MTH	141	Quantitative Literacy	3
		Humanities and Fine Arts	3
		Science Elective	3
			15

Second Semester:

ANT	121	Introduction to Anthropology	3
ENG	122	English Composition II	3
BIO	121	General Biology	4
MTH		Math Elective	3
		Humanities and Fine Arts	3
			16

Third Semester:

ECO	221	Principles of Economics I	3
GEG	122	Cultural Geography	3
HST	121	History of Western Civilization I	3
SPE	121	Fundamentals of Speech	3
		Humanities and Fine Arts Elective	3
			15

Fourth Semester:

ANT	221	Cultural Anthropology	3
GEG	123	World Regional Geography	3
HST	122	History of Western Civilization II	3
		Math or Science Elective	3
		Electives	3
			15

Math requirements vary at 4-year institutions

The BA degree at many 4-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school you need only one more year of advanced study at CLC. Students who have completed 4 years of foreign language at the high school level need not take any additional foreign language.

Students planning to major in geography at a baccalaureate institution are strongly recommended to have word processing skills prior to entering their junior year.

Faculty who teach in this subject area are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
Noel Stirrat	A251	(847) 543-2942

GEOLOGY

(Associate in Science)
Plan 11AB
Engineering, Mathematics and Physical Science Division
Room B162, (847) 543-2044

The following courses are ***recommended*** for students who intend to complete the A.S. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

For those transferring to the University of Illinois a strong foreign language component is also required.

First Semester

ENG	121	English Composition I	3
MTH	145	Calculus and Analytic Geometry I	5
CHM	121	General Chemistry I	5
GEO	121	Physical Geology	4
			17

Second Semester

ENG	126	Advanced Composition: Scientific and Technical Communications	3
		Social & Behavioral Sciences Elective	3
CHM	123	General Chemistry II	5
GEO	122	Historical Geology	4
		Humanities & Fine Arts Elective[1]	3
			18

Third Semester

SPE	121	Fundamentals of Speech	3
MTH	146	Calculus and Analytic Geometry II	4
PHY	123	Physics for Science and Engineering I	5
		Humanities & Fine Arts Elective[1]	3
		Social & Behavioral Sciences Elective	3
			18

Fourth Semester

MTH	246	Calculus and Analytic Geometry III	4
PHY	124	Physics for Science and Engineering II	5
		Humanities & Fine Arts Elective	3
		Social & Behavioral Sciences Elective[1]	3
		Life Science Elective	4
			19

[1] At least one Humanities and one Fine Arts are required.

Students will also need an international education course (see page 61.)

Note: Some students may require pre-calculus course work. As a result "First Semester" in this program may not correspond to a student's first semester in college.

For more information on this course of study students may contact either the division office listed or either of the following full-time faculty members.

Name	Office	Phone Number
Ron Riepe	B131	(847) 543-2491

HISTORY

(Associate in Arts)
Plan 13AB
Social Science Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA or AS degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
HST	121	History of Western Civilization I	3
HUM	121	Introduction to Humanities	3
PSC	121	American National Politics	3
		Humanities and Fine Arts	3
			15

Second Semester

ENG	122	English Composition II	3
HST	122	History of Western Civilization II	3
ANT	221	Cultural Anthropology	3
MTH	141	Quantitative Literacy	3
		Humanities and Fine Arts	3
			15

Third Semester

SPE	121	Fundamentals of Speech	3
HST	221	U.S. History to 1876	3
ECO	221	Principles of Economics I	3
BIO	120	Environmental Biology ***or***	
BIO	121	General Biology	4
		Electives	3
			16

Fourth Semester

HST	222	U.S. from 1876	3
PHI	121	Introduction to Philosophy	3
GEG	121	Physical Geography	3
ENG	226	Modern English Literature	3
		Electives	3
			15

The BA degree at many 4-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school you need only one more year of advanced study at CLC. Students who have completed 4 years of foreign language at the high school level need not take any additional foreign language.

Math requirements vary at 4-year institutions

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty.

Name	Office	Phone Number
Gregory Gordon	D119	(847) 543-2945
David Groeninger	A253	(847) 543-2540
Septimus Paul	A153	(847) 543-2936

HUMANITIES

(Associate in Arts)
Plan 13AB
Humanities Division, Room B237, (847) 543-2040

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
HUM	121	Introduction to Humanities I	3
HUM	125	Introduction to the Fine Arts **or**	
MUS	124	Introduction to Music	3
HST	121	History of Western Civilization I	3
		Math Elective	3
			15

Second Semester

ENG	122	English Composition II	3
HUM	122	Introduction to Humanities II	3
		Social & Behavioral Sciences Elective	3
		Physical & Life Science Elective[1]	3
		Elective	5
			17

Third Semester

SPE	121	Fundamentals of Speech	3
ENG	228	World Literature	3
HUM	128	Introduction to Mid-Eastern Civilizations	3
PHI	121	Introduction to Philosophy	3
ART	240	History of Art I	3
		Physical & Life Sciences Lab Elective[1]	4
			19

Fourth Semester

ART	241	History of Art II	3
ANT	221	Cultural Anthropology **or** Social & Behavioral Sciences Elective	3
PHI	123	Philosophy of Religion	3
THE	121	Introduction to Theatre **or** HUM 126 English Elective	3
			15

[1] One physical science, one life science, one must include a lab.

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty.

Name	Office	Phone Number
Penne Devery	B265	(847) 543-2561
Eibhlin Glennon	P221	(847) 543-2567
Leslie Hopkins	B263	(847) 543-2961
Nick Schevera	A249	(847) 543-2561
Ken Simonsen	P220	(847) 543-2554
Rebecca Thall	B262	(847) 543-2559

INTERNATIONAL STUDIES

(Associate in Arts)
Plan 13AB
Educational Affairs, Room C206, (847) 543-2418

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

PHI	123	Philosophy of Religion	3
ENG	121	English Composition I	3
PSC	121	American National Politics	3
		Fine Arts*	3
		Foreign Language**	4
GEG	123	World Regional Geography ***or***	
HST	126	History of Contemporary Non-Western Civilization ***or***	
HST	127	History of Chinese Culture & Society	3
			16

Second Semester

ENG	122	English Composition II *or*	
ENG	126	Advanced Composition: Scientific & Technical Communications	3
PSC	221	Comparative Political Systems	3
SPE	121	Fundamentals of Speech	3
		Foreign Language**	4
		Humanities***	3
			16

Third Semester

ECO	221	Principles of Macroeconomics	3
MTH	141	Quantitative Literacy	3
		Life Science (Lab)	4
		Elective****	3
			13

Fourth Semester

PSC	222	International Politics	3
ENG	246	Latin American Writers *or*	
HUM	128	Introduction to Mid-Eastern Civilizations	3
ECO	225	Comparative Economic Systems	3
		Physical Science	3
		Elective****	3
			15

Electives

*** Fine Arts**

ART	240	History of Art	3
ART	241	History of Art II	3
ART	242	History of Art III	3
HUM	121	Introduction to Humanities I	3
HUM	122	Introduction to Humanities II	3

***** Humanities**

ENG	228	World Literature	3
ENG	244	Mythology & Fairy Tales	3
ENG	247	International Women Writers	3
PHI	123	Philosophy of Religion	3
PHI	125	Introduction to Ethics	3

**** Foreign Languages**

The equivalent of eight hours of credit in Foreign Language which includes the 4th course in any French, Spanish, German, Italian, Arabic, Japanese, Russian, Chinese.

****** Suggested Electives**

ANT	121	Introduction to Anthropology	3
ANT	221	Cultural Anthropology	3
BUS	121	Introduction to Business	3
BUS	270	Introduction to International Business	3
ENG	128	Linguistics and Society	3
GEG	122	Cultural Geography	3
GEG	223	Latin American Geography	3
HST	121	History of Western Civilization I	3
HST	122	History of Western Civilization II	3
SPE	127	Intercutural Communications	3
HUM	124	International and Regional Studies in Humanities	variable
SSI	124	International Studies in Social Science	variable

MATHEMATICS

(Associate in Science)
Plan 11AB
Engineering, Mathematics and Physical Science Division
Room B162, (847) 543-2044

The following courses are ***recommended*** for students who intend to complete the A.S. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Pay particular attention to the IAI general education requirements and stipulations. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

For those transferring to NIU, SIU and the University of Illinois a strong foreign language component is also required.

First Semester

MTH	145	Calculus and Analytic Geometry I	5
BIO	121	General Biology I	4
ENG	121	English Composition I	3
PHI	122	Logic	3
			15

Second Semester

MTH	146	Calculus and Analytic Geometry II	4
MCS	140	Computer Programming I *or*	
MCS	141	Computer Science I	3-4
ENG	122	English Composition II **or** ENG 126	3
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective[1]	3
			16-17

Third Semester

MTH	246	Calculus and Analytic Geometry III	4
MTH	227	Ordinary Differential Equations	3
PHY	123	Physics for Science & Engineering I	5
		Social & Behavioral Sciences Elective	3
			15

Fourth Semester

SPE	121	Fundamentals of Speech	3
MCS	142	Computer Programming II	3
MTH	244	Discrete Mathematics	3
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective[1]	3
			15

[1] At least one course must be a Fine Arts course.

Note: Some students may require pre-calculus course work. As a result "First Semester" in this program may not correspond to a student's first semester in college. Discussing your particular situation with a mathematics advisor is the best way to plan an appropriate program.

For more information on this course of study students may contact either the division office listed or any of the following full-time faculty members.

Name	Office	Phone Number
Donna Carlson	B135	(847) 543-2900
Natalia Casper	B133	(847) 543-2801
Virginia Coil	B139	(847) 543-2639
Annie Grossman	B135	(847) 543-2505
James Fryxell	D114	(847) 543-2494
Tracey Hoy	B139	(847) 543-2901
Byron Hunter	B138	(847) 543-2910
Marvin Johnson	B133	(847) 543-2744
Wing Park	B135	(847) 543-2493
Scott Reed	B136	(847) 543-2909
Kimberly Shryock	B136	(847) 543-2924
Mark Smith	D114	(847) 543-2906
John Thomas	B137	(847) 543-2912
Richard Wong	B137	(847) 543-2913
May Xu	B139	(847) 543-2497

MUSIC

(Associate in Arts)
Plan 13AB
Humanities Division, Room B237, (847) 543-2040

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met. *Non-music courses may be taken in any sequence.*

Summer Session

MUS	127	Fundamentals of Music[1]	2
		Social & Behavioral Sciences Elective	3
			5

First Semester

MUS	128	Theory of Music I	4
MUS	145	Piano Class or MUS 143, 144	1
MUS	141	or MUS 143 or MUS 160-188	1-2
MUS	120	Vocal Ensembles ***or***	
MUS	123	Wind Ensemble ***or***	
MUS	223	Jazz Ensemble	1
ENG	121	English Composition I	3
		Humanities & Fine Arts Elective (non-music)[2]	3
			13-14

Second Semester

MUS	129	Theory of Music II	4
MUS	143	or MUS 144 (Applied Music)	1
MUS	141	or MUS 143 or MUS 160-188	1-2
MUS	120	Vocal Ensembles ***or***	
MUS	123	Wind Ensemble ***or***	
MUS	223	Jazz Ensemble	1
MUS	224	Music Literature	3
ENG	122	English Composition II ***or***	
ENG	126	Advanced Technical Composition	3
		Humanities & Fine Arts Elective	3
			16-17

Third Semester

MUS	228	Theory of Music III	4
MUS	241	or MUS 243, 244, 260-288	1-2
MUS	120	Vocal Ensembles ***or***	
MUS	123	Wind Ensemble ***or***	
MUS	223	Jazz Ensemble	1
SPE	121	Fundamentals of Speech	3
		Physical & Life Science Elective	3-4
		Social & Behavioral Science Elective	3
			15-17

Fourth Semester

MUS	229	Theory of Music IV	4
MUS	241	or MUS 243, 244, 260-288	1-2
MUS	120	Vocal Ensembles ***or***	
MUS	123	Wind Ensemble ***or***	
MUS	223	Jazz Ensemble	1
		Physical & Life Science Elective	3-4
		Social & Behavioral Science Elective	3
		Math Elective	3
			15-17

[1] Students unfamiliar with keys, scales, intervals, and basic rhythms should take MUS 127 prior to MUS 128. MUS 127 may be waived for those who are familiar with these elements of music.

[2] Add a Social & Behavioral Elective if not taken during the summer session.

The B.A. degree at many 4-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school, you need only one more year at CLC at an advanced level. Students who have completed 4 years of foreign language at the high school level need not take any additional foreign language.

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty.

Name	Office	Phone Number
Music		
Tom Hoekstra	P218	(847) 543-2569
Bruce Mack	P218	(847) 543-2566
Dance		
Valerie Alpert	P218	(847) 543-2432

PHILOSOPHY

(Associate in Arts)
Plan 13AB
Humanities Division, Room B237, (847) 543-2040

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
PHI	121	Introduction to Philosophy	3
		Humanities Elective (non-philosophy)	3
		Social & Behavioral Sciences Elective	3
		Physical & Life Science Elective[1]	4
			16

Second Semester

ENG	122	English Composition II	3
SPE	121	Fundamentals of Speech	3
PHI	122	Logic	3
		Social & Behavioral Sciences Elective	3
		Fine Arts Elective (non-Philosophy)	3
			15

Third Semester

PHI	125	Ethics	3
MTH	141	Quantitative Literacy	3
PSY	121	Introduction to Psychology **or**	
SOC	121	Introduction to Sociology	3
		Physical & Life Science Elective[1]	4
		Humanities & Fine Arts Elective	3
			15

Fourth Semester

PHI	123	Philosophy of Religion	3
ANT	121	Introduction to Anthropology **or**	
ANT	221	Cultural Anthropology	3
		Humanities & Fine Arts Elective	6
		General Elective	6
			18

[1] One physical science, one life science, one must include a lab.

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty.

Name	Office	Phone Number
Edwin George	B264	(847) 543-2560
Leslie Hopkins	B263	(847) 543-2961
Ken Simonsen	P220	(847) 543-2554
Brian Smith	B262	(847) 543-2960
Rebecca Thall	B261	(847) 543-2559

PHYSICAL EDUCATION

(Associate in Arts)
Plan 13AB
Biological and Health Sciences Division
Room C-140, (847) 543-2042

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

In addition, individual four year colleges may specify certain courses required of their physical education majors. Students are urged to check the school catalog of their choice.

First Semester

ENG	121	English Composition I	3
PED	129	Fundamentals of Youth Programming	4
PSC	121	American National Politics	3
PED	221	Introduction to Physical Education	2
PED	140	Contemporary Health Issues (CPR required)	2
		Coaching Strategies Elective	2
			16

Second Semester

ENG	122	English Composition II	3
MUS	124	Introduction to Music	3
PED	220	Physical Education in Elementary School	3
PED	228	First Aid (CPR certification required)	2
PED	123	Team Sports Elective	1
		Humanities Elective	3
			15

Third Semester

SPE	121	Fundamentals of Speech	3
PED	242	Philosophy of Coaching	3
SOC	121	Introduction to Sociology	3
GEO	224	Environmental Geology	3
		International Education Elective*	3
			15

Fourth Semester

PSY	121	Introduction to Psychology	3
BIO	120	Environmental Biology	4
MTH	141	Quantitative Literacy	3
PED	123	Team Sports Elective	1
		Humanities *or* Fine Arts Elective	3
			14

*List of electives on page 61.

Suggested course offerings. Check with major university to determine acceptability.
For more information on this course of study, students may contact the division office listed.

PHYSICS

(Associate in Science)
Plan 11AB
Engineering, Mathematics and Physical Science Division
Room B162, (847) 543-2044

The following courses are ***recommended*** for students who intend to complete the A.S. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

For those transferring to the University of Illinois a strong foreign language component is also required.

First Semester

ENG	121	English Composition I	3
CHM	121	General Chemistry I	5
MTH	145	Calculus and Analytic Geometry I	5
		Social & Behavioral Sciences Elective	3
			16

Second Semester

ENG	122	English Composition II **or**	
ENG	126	Advanced Composition: Scientific and Technical Communications	3
CHM	123	General Chemistry II	5
MTH	146	Calculus and Analytic Geometry II	4
PHY	123	Physics for Science and Engineering I	5
			17

Third Semester

SPE	121	Fundamentals of Speech	3
PHY	I24	Physics for Science and Engineering II	5
MTH	246	Calculus and Analytic Geometry III	4
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective[1]	3
			18

Fourth Semester

MTH	227	Ordinary Differential Equations	3
MCS	140	Computer Programming I	3
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective[1]	6
			15

Summer Session

PHY	221	Physics for Science and Engineering III	4
			4

[1] At least one course must be a Fine Arts course. Students who need to complete IAI general education core requirements will also need a life science course.

Note: Some students may require pre-calculus course work. As a result "First Semester" in this program may not correspond to a student's first semester in college.

For more information on this course of study students may contact either the division office listed or one of the following full-time faculty members.

Name	Office	Phone Number
David Boyke	B132	(847) 543-2911

POLITICAL SCIENCE

(Associate in Arts)
Plan 13AB
Social Science Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA or AS degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
PSC	121	American National Politics	3
SPE	121	Fundamentals of Speech	3
MTH	141	Quantitative Literacy	3
		Electives	3
			15

Second Semester

ENG	122	English Composition II	3
PSC	122	State and Local Politics	3
PHI	121	Introduction to Philosophy	3
BIO	120	Environmental Biology *or*	
BIO	121	General Biology	4
ANT	221	Cultural Anthropology	3
			16

Third Semester

PSC	221	Comparative Political Systems	3
HST	121	History of Western Civilization I	3
GEG	121	Physical Geography	3
		Humanities and Fine Arts	3
		Elective	3
			15

Fourth Semester

PSC	222	United States Foreign Policy	3
HST	122	History of Western Civilization II	3
		Humanities and Fine Arts	3
		Electives	6
			15

Math requirements vary at 4-year institutions

The BA degree at many 4-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school you need only one more year of advanced study at CLC. Students who have completed 4 years of foreign language at the high school level need not take any additional foreign language.

For more information on this course of study students may contact either the division office listed or one of the following full-time faculty members.

Name	Office	Phone Number
Maureen Starshak	A237	(847) 543-2940
Maria Pérez Laubhan	A154	(847) 543-2541

PRE-DENTISTRY, PRE-MEDICINE, PRE-OCCUPATIONAL THERAPY, PRE-PHARMACY or PRE-PHYSICAL THERAPY

(Associate in Science)
Plan 11AB
Biological and Health Sciences Division
Room C140, (847) 543-2042

Students who plan to transfer to a four-year college or university to pursue a baccalaureate degree in these pre- professional programs ordinarily follow the Biological Sciences or Chemistry curricula. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. ***Students should choose electives only after consulting with an advisor.*** All course prerequisites must be met.

For more information on these courses of study, students may contact the division office listed or the following faculty members:

Name	Office	Phone Number
Pre-Dentistry		
Anne Loeb	B246	(847) 543-2308
Dick Meginniss	C147	(847) 543-2326
Pre-Medicine		
Dick Meginniss	C147	(847) 543-2326
Pre-Occupational Therapy		
Jerry Hinkley	C145	(847) 543-2322
Pre-Pharmacy		
Anne Loeb	B246	(847) 543-2308
Dick Meginniss	C147	(847) 543-2326
Pre-Physical Therapy		
John Mathwig	C144	(847) 543-2324

PRE-VETERINARY MEDICINE

(Associate in Arts)
Plan 13AB
Biological and Health Sciences Division
Room C140, (847) 543-2042

The following courses are ***recommended*** for students who intend to complete an A. A. degree at the College of Lake County and prepare for transfer to a pre-vet program at a four-year institution. All students must complete the general education requirements listed in the CLC catalogue in order to earn the A. A. degree. All course prerequisites must be met. Pre-vet students should contact the Veterinary school they intend to enter and modify the course selection listed below as needed. However, the student must recognize when such changes preclude their obtaining a degree at CLC and decide if this is in their best interest.

First Semester

BIO	121	General Biology I	4
CHM	121	General Chemistry	5
ENG	121	English Composition I	3
		Humanities Elective	3
		Social & Behavioral Sciences Elective	3
			18

Second Semester

BIO	122	General Biology II	4
CHM	123	General Chemistry II	5
ENG	122	English Composition II[1] *or*	
ENG	126	Advanced Composition[1]	3
MTH	222	Elementary Statistics	4
			16

Summer Session

		Social & Behavioral Sciences Elective	3
			3

Third Semester

PHY	121	General Physics I	5
CHM	125	Elementary Organic Chemistry	5
SPE	121	Fundamentals of Speech	3
		Fine Arts Elective	3
			16

Fourth Semester

BIO	221	General Zoology[2]	4
CHM	224	Biochemistry	3
PHY	122	General Physics II	5
		Humanities & Fine Arts Elective[1]	3
		Social & Behavioral Sciences Elective[1]	3
			18

[1] Not required by U of I, College of Veterinary Medicine, but meets CLC's A.A. degree general education requirements.
[2] Strongly recommended. Required by University of Wisconsin, School of Veterinary Medicine. Not required by U of I, College of Veterinary Medicine

For more information on this course of study, students should contact the division office listed or Scott Hickman, office C146, (847) 543-2884.

PSYCHOLOGY

(Associate in Arts)
Plan 13AB
Social Science Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA or AS degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
BIO	121	General Biology I	4
PSY	121	Introduction to Psychology	3
		Humanities and Fine Arts	3
		Electives	3
			16

Second Semester

ENG	122	English Composition II	3
BIO	122	General Biology II	4
HST	121	History of Western Civilization I	3
PSY	222	Child Growth and Development	3
		Elective	3
			16

Third Semester

SPE	121	Fundamentals of Speech	3
PSC	121	American National Politics	3
MTH	141	Quantitative Literacy	3
PSY	223	Abnormal Psychology	3
		Humanities and Fine Arts	3
			15

Fourth Semester

ANT	221	Cultural Anthropology	3
PSY	225	Social Psychology	3
		Humanities and Fine Arts	3
		Physical Science	3
		Electives	3
			15

The BA degree at many 4-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school you need only one more year of advanced study at CLC. Students who have completed 4 years of foreign language at the high school level need not take any additional foreign language.

Math requirements vary at 4-year institutions

Faculty who teach in this subject area are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
Mario Benassi	A253	(847) 543-2930
Joan Kerr	A155	(847) 543-2545
Diane Krumm	A254	(847) 543-2544
Shari Larson	A255	(847) 543-2938
Karen Owens	A155	(847) 543-2934
Suzanne Valentine-French	A154	(847) 543-2935

RECREATION (School and Community Recreation)

(Associate in Arts)
Plan 13AB
Biological and Health Sciences Division, Room C140, (847) 543-2042

The following courses are ***recommended*** for students who intend to complete the A.S. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
MUS	124	Introduction to Music	3
GEO	224	Environmental Geology	3
PED	128	Introduction to Recreation	3
PED	129	Fundamentals of Youth Programming	4
			16

Second Semester

ENG	122	English Composition II	3
PED	229	Experience in the Out of Doors	3
PSY	121	Introduction to Psychology	3
		Humanities Elective	3
		International Education Elective [1]	3
			15

Third Semester

SPE	121	Fundamentals of Speech	3
BIO	120	Environmental Biology	4
PED	228	First Aid (CPR certification required)	2
PED	140	Contemporary Health Issues (CPR required)	2
PSC	121	American National Politics	3
			14

Fourth Semester

PED	221	Recreation Fieldwork	4
SOC	121	Introduction to Sociology	3
MTH	141	Quantitative Literacy	3
PED	149	Leisure Sports	2
		Humanities *or* Fine Arts Elective	3
			15

[1] List of electives on on page 61.

For more information on this course of study, students may contact the division office listed.

SOCIOLOGY

(Associate in Arts)
Plan 13AB
Social Science Division, Room A244, (847) 543-2047

The following courses are ***recommended*** for students who wish to complete the AA or AS degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the AA or AS degree must complete the general requirements listed on page 46 of the College Catalog. Students should become familiar as soon as possible with the requirements of the institution they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
SOC	121	Introduction to Sociology	3
HST	121	History of Western Civilization I	3
MTH	141	Quantitative Literacy	3
		Elective	3
			15

Second Semester

ENG	122	English Composition II	3
SOC	222	Social Problems	3
ECO	221	Principles of Economics I	3
BIO	120	Environmental Biology *or*	
BIO	121	General Biology	4
		Humanities and Fine Arts	3
			16

Third Semester

SPE	121	Fundamentals of Speech	3
SOC	224	Sociology of the Family	3
PSY	121	Introduction to Psychology	3
GEG	121	Physical Geography	3
		Elective	3
			15

Fourth Semester

ANT	121	Introduction to Anthropology or	
ANT	221	Cultural Anthropology	3
PSC	121	American National Politics	3
PHI	121	Introduction to Philosophy	3
		Humanities and Fine Arts	3
		Elective	3
			15

Math requirements vary at 4-year institutions

The BA degree at many 4-year institutions requires two years of foreign language at the college level. If you had two years of a foreign language in high school you need only one more year of advanced study at CLC. Students who have completed 4 years of foreign language at the high school level need not take any additional foreign language.

Students planning to major in sociology at a baccalaureate institution should have word processing skills prior to their junior year.

Faculty who teach in this subject area are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
James Dorsey	D120	(847) 543-2932
Madelain Gerbault-Vanasse	A252	(847) 543-2939
Jerry Hanson	A250	(847) 543-2931
Mike Kuchera	A255	(847) 543-2933
John Tenuto	A250	(847) 543-2537
Li-hua Yu	D119	(847) 543-2741

SPANISH

(Associate in Arts)
Plan 13AB
Humanities Division, Room B237, (847) 543-2040

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

SPA	121	Beginning Conversational Spanish I **or** SPA 221[2]	4
ENG	121	English Composition I	3
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective[4] (non-Spanish)	3
		Elective	3
			16

Second Semester

SPA	122	Beginning Conversational Spanish II **or** SPA 222[1]	4
ENG	122	English Composition II or ENG 126 Advanced Composition[2]	3
		Social & Behavioral Sciences Elective	3
		Math Elective	3
		Humanities & Fine Arts Elective	3
			16

Third Semester

SPA	221	Intermediate Spanish I **or** SPA 223 Spanish Civilization I[3]	3-4
SPE	121	Fundamentals of Speech	3
		Physical & Life Sciences Lab Elective[5]	4
		Elective	3
		Elective	2
			15-16

Fourth Semester

SPA	222	Intermediate Spanish II **or** SPA 224 Spanish Civilization II[3]	3-4
		Social & Behavioral Sciences Elective	3
		Physical & Life Science Elective[5]	3
		Elective	3
		Elective	3
			15-16

[1] Students with at least two recent years of successful high school Spanish should enroll in SPA 221-222.
[2] Students wishing to coordinate Spanish with Business or other technical study should opt for ENG 126.
[3] Students who have completed the intermediate courses should enroll in SPA 223-224 (Spanish Civilization).

[4] One course must be a Fine Arts course.

[5] One course must be a physical science, one life science, one must be a lab.

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty members.

Name	Office	Phone Number
Maria Manterola	B247	(847) 543-2291
Theresa Ruiz-Velasco	B247	(847) 543-2579
Raymond Salazar	A235	(847) 543-2363

SPEECH

(Associate in Arts)
Plan 13AB
Humanities Division, Room B237, (847) 543-2040

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
SPE	121	Fundamentals of Speech	3
ENG	123	Mass Communications	3
		Social & Behavioral Science Elective	3
		Lab Science Elective	4
			16

Second Semester

ENG	122	English Composition II	3
SPE	122	Business & Professional Speaking	3
		Physical Life Science Elective	3
		Social & Behavioral Science Elective	3
		General Elective	3
			15

Third Semester

SPE	123	Group Discussion	3
ENG	244	Mythology and Fairy Tales	3
		Math Elective	3
		Social & Behavioral Science Elective	3
		General Elective	3
PED		Elective	1
			16

Fourth Semester

SPE	124	Oral Interpretation ***or***	
SPE	128	Interviewing	3
ENG	128	Linguistics and Society	3
PHI	121	Introduction to Philosophy	3
HUM	123	Introduction to Film	3
		General Elective	3
PED		Elective	1
			16

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty.

Speech Faculty

Name	Office	Phone Number
Nedra Adams-Soller	B261	(847) 543-2957
Michael Butterworth	B260	(847) 543-2946
Robert Coscarelli	P221	(847) 543-2623
Fred Gifford	B260	(847) 543-2556
Rick Soller	B261	(847) 543-2958

THEATRE

(Associate in Arts)
Plan 13AB
Humanities Division, Room B237, (847) 543-2040

The following courses are ***recommended*** for students who intend to complete the A.A. degree at the College of Lake County and transfer to a four-year college or university. All students must complete the general requirements listed on page 46 of this catalog in order to earn the A.A. or A.S. degree. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

ENG	121	English Composition I	3
SPE	121	Fundamentals of Speech	3
THE	125	Principles of Acting I **or** THE 126	3
		Social & Behavioral Sciences Elective	3
		Physical & Life Sciences Lab Elective[1]	4
			16

Second Semester

ENG	122	English Composition II	3
THE	225	Acting II **or**	
THE	222	Stage Makeup **or**	
THE	226	Lighting for Stage and Studio	3
		Physical & Life Sciences Elective[1]	3
		Social & Behavioral Sciences Elective	3
		Elective	3
			15

Third Semester

THE	228	Directing I **or**	
THE	121	Introduction to Theatre	3
ENG	228	World Literature	3
		Math Elective	3
		Social & Behavioral Sciences Elective	3
		Elective	3
			15

Fourth Semester

SPE	124	Oral Interpretation **or**	
THE	129	Theatre Practicum	3
ENG	227	Introduction to Shakespeare	3
PHI	121	Introduction to Philosophy	3
HUM	123	Introduction to Film **or**	
THE	126	Stagecraft	3
MUS	121	Voice Class	1
PED		(Dance or Fencing)	1
			14

[1] One course must be a physical science, one life science, one must be a lab.

For more information about this course of study, students may contact either the division office listed or any of the following full-time faculty.

Theatre Faculty

Name	Office	Phone Number
Robert Coscarelli	P221	(847) 543-2623
Eibhlin Glennon	P221	(847) 543-2567
Thomas Mitchell	P123b	(847) 543-2967

Associate in Applied Science

& Career Certificate

Programs of Study

ACCOUNTING

(Associate in Applied Science)
Plan 22AA
Business Division, Room A143, (847) 543-2041

Students are prepared to compile and analyze business records and prepare financial reports such as income statements, balance sheets, costs studies and reports.

General Education Requirements:

Speech.

SPE	111	Communications II *or*	
SPE	121	Fundamentals of Speech *or*	
SPE	128	Interviewing Practices	3

English

ENG	121	English Composition I *and*	
AOS	111	Business Communications *or*	
ENG	126	Advanced Composition: Scientific & Technical Communications	6

Social Sciences

PSY	122	Psychology in Business and Industry *or*	
PSY	121	Introduction to Psychology	3
ECO	110	Economics for Business and Industry *or*	
ECO	221	Principles of Economics I **and**	
ECO	222	Principles of Economics II	3-6

Humanities and Fine Arts

		Elective (recommend PHI 122 *or* PHI 125)	3

Math

AOS	122	Business Mathematics *or*	
MTH	222	Elementary Statistics *or*	
MTH	127	Finite Math I *or*	
MTH	224	Introduction to Mathematical Analysis	3-4
			21-25

Accounting Core Courses Required:

ACC	121	Financial Accounting	4
ACC	122	Managerial Accounting	4
ACC	212	Federal Tax Accounting I	3
ACC	214	Cost Accounting I	3
ACC	221	Intermediate Accounting I	3
ACC	222	Intermediate Accounting II	3
			20

Business Courses Required:

CIS	120	Introduction to Computers *or*	
CIS	119	Introduction to Office Software	3
BUS	221	Business Law I	3
BUS	121	Introduction to Business	3
			9

Business Electives (10 hours)

ACC	112	Accounting Procedures	3
ACC	114	Payroll Accounting	3
ACC	171	Accounting Information-Computer Systems	4
ACC	213	Federal Tax Accounting II	3
ACC	215	Cost Accounting II	3
ACC	223	Intermediate Accounting III	3
ACC	270	Advanced Accounting	4
ACC	271	Auditing	3
AOS	122	Business Mathematics	3
BUS	222	Business Law II	3
MTH	122	College Algebra *or* higher level math course	3-4
CIS		Electives	1-7
BUS		Electives	3-6
AOS		Electives	1-4
EWE	220	Cooperative Work Experience I	3
		Total Hours	10
		Minimum hours to complete A.A.S	60

Complete CPA Requirements at CLC

Effective in the year 2001, to apply for the CPA examination a candidate must have 150 semester hours of acceptable college level education, including at least a bachelor's degree. The total hours must include an accounting concentration or equivalent as determined by the Illinois Board of Examiners. A candidate will be deemed to have met the education requirement if, as part of the 150 semester hours the candidate meets any one of the following four conditions. Accounting hours do not include business law and no more than six semester hours of accounting may be internship or life experience.

1. Earned graduate degree with a concentration in accounting.
2. Earned graduate degree in business with at least 24 semester hours in accounting at the undergraduate level or 15 semester hours at the graduate level, including the subjects of financial accounting, auditing, taxation, and management accounting.
3. Earned baccalaureate degree in business with at least 24 hours in accounting including courses covering the subjects of financial accounting, auditing, taxation, and management accounting.
4. Earned baccalaureate degree with at least 24 hours in accounting with at least one course each in financial accounting, auditing, taxation, and management accounting and at least 24 hours in business courses (other than accounting courses).

At CLC it is recommended that the total accumulation of hours include ACC 121, 122, 212, 213, 214, 221, 222, 223, 270, 271, BUS 221, 222, CIS 120 and MTH 222. Additional information and application can be obtained from the Illinois Board of Examiners, University of Illinois, 505 E. Green Street, Room 216, Champaign, Illinois 61820-5723 or telephone (217) 333-1565. (ICPA Society home page: www.icpas.org)

CMA Certificate
The CMA (Certified Management Accountant) is a national program with no state affiliates. The candidate must have senior standing at an accredited college or university, or must hold a baccalaureate degree, in any field, or have passed the U.S. CPA examination. Anyone who has passed the U.S. CPA examination is given credit for part 2 of the CMA examination. Recommended courses at CLC include ACC 121, 122, 214, 221, 222, 223, 271, BUS 111, 221, 222, 223, CIS 120, ECO 221,222, 223, MTH 222, 224, and HUM 127. Additional information can be obtained by phoning ICMA, (800) 638-4427.

Accounting Clerk

(Certificate)
Plan 22AI

ACC	112	Accounting Procedures I *or*	
ACC	121	Financial Accounting	3-4
ACC	113	Financial Statement Analysis *or*	
ACC	122	Managerial Accounting	3-4
ACC	114	Payroll Accounting *or*	
ACC	212	Federal Tax Accounting I	3
ACC	171	Accounting Information and Computer Systems	3
AOS	111	Business Communications	3
AOS	122	Business Mathematics	3
CIS	119	Introduction to Office Software	3
		Total Hours	21-23

Professional Accounting Certificate

(Certificate)
Plan 22AB

This certificate covers the body of knowledge necessary to prepare for the Certified Public Accounting Exam. It is designed for individuals who already possess a bachelor's degree. Please refer to the boxed information preceding this certificate for specific requirements. It is strongly recommended that you take a CPA Review course prior to sitting for the exam.

ACC	221	Intermediate Accounting I	3
ACC	222	Intermediate Accounting II	3
ACC	223	Intermediate Accounting III	3
ACC	212	Federal Tax Accounting I	3
ACC	213	Federal Tax Accounting II	3
ACC	214	Cost Accounting	3
ACC	270	Advanced Accounting	4
ACC	271	Auditing	3
BUS	221	Business Law I	3
BUS	222	Business Law II	3
		Total Hours	31

* If you have taken a year of accounting principles at the undergraduate level, the prerequisite for ACC 221, ACC 212, and ACC 214 will have been met. It is recommended that you have computer courses and statistics in your background as well.

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Accounting

Name	Office	Phone Number
Jay Chittal	A138	(847) 543-2520
Scott Steinkamp	A134	(847) 543-2524
Mary Zenner	A138	(847) 543-2522

ADMINISTRATIVE OFFICE SYSTEMS ADMINISTRATIVE ASSISTANT

(Associate in Applied Science)
Plan 22SM
Business Division, Room A143, (847) 543-2041

The Administrative Office Systems degree provides a blend of office automation skills including word processing and related computer applications leading to positions as administrative assistants in an office environment. In addition, students establish essential skills in business communication and general business skills and practices.

First Semester

AOS	112	Automated Office Technologies	3
AOS	128	Intermediate Keyboarding	4
AOS	172	Business English	3
AOS	122	Business Mathematics	3
BUS	121	Introduction to Business	3
			16

Second Semester

AOS	111	Business Communications	3
AOS	223	Advanced Keyboarding *or* AOS Elective*	3
AOS	119	Records Management	2
AOS	113	Comprehensive Word Processing	3
CIS	111	Comprehensive Spreadsheet	3
			14

* A student who earns a final grade of "B" or better in AOS 128, Intermediate Keyboarding AND demonstrates 50 words a minute on a 5 minute timing with 5 or fewer errors may substitute a 3 credit hour AOS elective for AOS 223.

Third Semester

AOS	118	Advanced Word Processing/ Desktop Publishing	2
AOS	117	Machine Transcription	3
AOS	215	Presentation Software	2
ACC	112	Accounting Procedures I *or*	
ACC	121	Financial Accounting	3-4
ENG	121	English Composition I	3
SPE	111	Communication II *or*	
SPE	128	Interviewing Practices *or*	
SPE	121	Fundamentals of Speech	3
			16-17

Fourth Semester

AOS	214	Administrative Office Procedures	3
AOS	216	Integrated Office Projects	3
PSY	121	Introduction to Psychology *or*	
PSY	122	Psychology in Business	3
		Humanities & Fine Arts Elective	3
		AOS Electives *or*	
		Social & Behavior Sciences Elective	3
			15

Total Hours 61-62

Elective Courses

AOS	175	Keyboarding Speed & Accuracy Building	2
AOS	299	Selected Topics in Office Automation	1-4
CIS	230	Comprehensive Database	3
HIT	111	Medical Terminology	3
		BUS Electives	1-4
		CIS Electives	1-3
		EWE	2-4

Other electives may be chosen with consent of an AOS Advisor.

General Office

(Certificate) • Plan 22SP

The General Office certificate prepares individuals for entry-level positions in the office with such titles as general office clerk, general office assistant, and clerk-typist. This certificate emphasizes general office skills and related skills needed for entry-level positions and career advancement.

AOS	170	Computer Keyboarding I	2
AOS	171	Computer Keyboarding II	2
AOS	128	Intermediate Keyboarding	4
AOS	113	Comprehensive Word Processing	3
AOS	112	Automated Office Technologies	3
AOS	172	Business English *or*	
AOS	111	Business Communication	3
		Total Hours	17

Office Assistant

(Certificate) • Plan 22SO

The Office Assistant certificate prepares individuals to perform a variety of advanced tasks and assume responsibility in the general office environment in positions with titles as general office assistant and word processor. This program emphasizes word processing and related office skills for both entry-level positions and career advancement.

Required Courses

AOS	112	Automated Office Technologies	3
AOS	128	Intermediate Keyboarding	4
AOS	113	Comprehensive Word Processing	3
AOS	118	Advanced Word Processing/ Desktop Publishing	2
AOS	215	Presentation Software	2
AOS	172	Business English	3
AOS	111	Business Communications	3
AOS	117	Machine Transcription	3
AOS	119	Records Management	2
CIS	111	Comprehensive Spreadsheet	3
		Electives	2
			30

Elective Courses

AOS	122	Business Mathematics	3
AOS	175	Keyboarding Speed and Accuracy Building	2
AOS	214	Administrative Office Procedures	3
AOS	223	Advanced Keyboarding	3
CIS	291	CorelDRAW	3
ACC	112	Accounting Procedures *or*	
ACC	121	Financial Accounting	3-4
AOS	299	Selected Topics in Office Automation	1-3
AOS	216	Integrated Office Projects	3

Other electives may be chosen with consent of an AOS Advisor.

Information Processing Specialist

(Certificate) • Plan 22SN

The Information Processing Specialist certificate prepares individuals for positions using current industry software. Students complete advanced word processing, presentation software, and spreadsheet courses and then select an additional computer-based course in order to specialize their skills.

Required Courses

AOS	113	Comprehensive Word Processing	3
AOS	118	Advanced Word Processing/ Desktop Publish	2
AOS	215	Presentation Software	2
CIS	111	Comprehensive Spreadsheets	3
		Elective Hours	2
		Total Hours	17

Elective Courses

AOS	112	Automated Office Technologies	3
AOS	216	Integrated Office Projects	3
AOS	299	Selected Topics in Office Automation	1- 3
BUS	114	Training Practices & Principles	3
CIS	120	Introduction to Computers	3
CIS	230	Comprehensive Database	3
CIS	231	Managing Microcomputer System	3
CIS	290	Desktop Publishing	3
CIS	291	CorelDRAW	3
CIS	292	Advanced Desktop Publishing	2
CIS	299	Selected Topics in Computer Information Systems	3
COM	116	Online Publishing	3

AOS students may choose other elective courses with consent of an AOS Advisor based on their specific needs.

For more information on these AOS courses of study, students may contact either the division office listed or one of the following faculty members.

Administrative Office Systems

Name	Office	Phone Number
Yvonne Block	A134	(847) 543-2819
Lauren LoPresti	A133	(847) 543-2925
Lynn Steffen	A133	(847) 543-2817

ARCHITECTURAL TECHNOLOGY

(Associate in Applied Science)
Plan 24CB
Engineering, Math, Physical Sciences Division
Room B162, (847) 543-2044

This program prepares graduates to assume a variety of duties in the architectural profession including drawing construction working drawings, design development drawings, renderings, cost estimating, specification writing, structural design and detailing, construction supervision, sales of materials and equipment, facilities engineering, building inspection and other building and zoning work. Graduates may be employed with architects, engineers, contractors, government agencies or others in the industry.

First Semester

ARC	121	Architectural Graphics	3
BCT	113	Construction Materials	3
MTH	117	Technical Math I or higher level Math	3-4
PHY	121	General Physics or higher Physics	5
CAD	110	CAD-CAM Concepts	3
			17-18

Second Semester

ARC	170	Architectural Design	3
CAD	117	Introduction to AutoCAD	3
EGR	115	Applied Mechanics Statics	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
MTH	118	Technical Math II or higher level Math	3-4
			15-16

Third Semester

ARC	171	Architectural Working Drawings	3
CAD	214	Architectural Applications	3
		Social & Behavioral Sciences Elective *or*	
ECO	110	Economics for Business & Industry	3
EGR	215	Mechanics of Materials for Technology	3
		Social & Behavioral Sciences Elective *or*	
PSY	122	Psychology in Business & Industry	3
SPE	111	or SPE 121 or SPE 122 or SPE 123 or SPE 128 Speech	3
			18

Fourth Semester

ARC	216	Architectural Illustration	3
ARC	271	Architectural Working Drawings II	3
ARC	228	History of Architecture	3
BCT	118	Mechanical & Electrical Equipment	3
BCT	119	Specifications & Bldg Codes	3
CAD	179	CAD Animation & Rendering	3
			18

Total Hours 68-70

Select any of the following math sequences:
- MTH 122 & 123
- MTH 145 & MCS 140.

Architectural Technology

(Certificate) • Plan 24CF

Thirty-four semester hours credit must be completed for the certificate in Architectural Technology with courses selected from the following; other subjects may be taken as part of the program, with advisor approval.

ARC	121	Architectural Graphics	3
ARC	170	Architectural Design.	3
ARC	171	Architectural Working Drawings	3
ARC	215	Architectural Planning	3
ARC	216	Architectural Illustration	3
ARC	228	History of Architecture	3
ARC	271	Architectural Working Drawings II	3
BCT	113	Construction Materials I	3
BCT	117	Construction Methods	3
BCT	118	Mechanical & Electrical Equipment	3
BCT	119	Specifications & Bldg Codes	3
BCT	214	Construction Estimating	3
CAD	117	Introduction to AutoCAD	3
CAD	177	Site Plan Drafting	3

CAD	179	CAD Animation & Rendering	3
CAD	214	Architectural Applications	3
CAD	217	AutoCAD II	3
CIV	111	Surveying I	3
ENG	120	Technical Composition I or	3
ENG	121	English Composition I	3
IMR	115	Carpentry I	3
MTH	117	Technical Mathematics I or higher level Math	3-4
		Total Hours	34

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Architectural Technology

Name	Office	Phone Number
Robert Twardock	A220a	(847) 543-2903

AUTOMOTIVE COLLISION REPAIR

(Certificate) • Plan 24AG
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This program prepares the student for employment in the auto body repair and painting industry.

ABR	110	Non-Structural Repair I	4
ABR	111	Non-Structural Repair II	4
ABR	115	Automotive Welding	3
ABR	118	Automotive Plastic Repair	2
		Total Hours	13

For more information on this course of study students may contact the division office.

AUTOMOTIVE TECHNOLOGY

(Associate in Applied Science)
Plans 24AH, 24AI, 24AJ
(Certificates)
Plans 24AV, 24AX, 24AY
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

The Automotive Technology programs offer courses leading to three Associate in Applied Science degrees: Under Hood Technician, Transmission Technician and Under the Car Technician. These programs will provide students with a solid foundation and a variety of skills to enter the automotive industry, or to pursue further undergraduate study. The three certificate programs have been designed to give students an opportunity to specialize and concentrate their efforts in related areas of automotive repair. The program is certified in all eight areas by ASEs National Automotive Technicians Education Foundation, Inc. (NATEF). This is the highest level of certification that ASE awards.

Under Hood Technician

(Certificate & A.A.S. Specialty)
Codes 24AV & 24AH

Phase I

AUT	171	Engine Rebuilding	5
AUT	172	Auto Electrical I	5
AUT	170	General Automotive *or*	
AUT	174	Applied Mechanics (Auto)	4
MTH	114	Applied Math I or higher level Math	3
			17

Phase II

AUT	173	Auto Electrical II	5
AUT	215	Automotive Management	3
AUT	271	Fuel Systems I	5
AUT	275	Air Conditioning & Heating	5
			18

Phase III

AUT	272	Fuel Systems II	5
AUT	276	Engine Systems Diagnosis	5
AUT	277	Advanced Specialization	5
			15

Total Hours for Certificate 50

For A.A.S. Degree add the following:
• general education courses listed on the following page.

Total Hours for A.A.S. degree 65

Transmission Technician

(Certificate & A.A.S.)
Codes 24AX & 24AI

Completion of these programs prepares the student for employment in diagnosing, testing, and repairing transmissions and drivelines.

Phase I

AUT	171	Engine Rebuilding	5
AUT	172	Auto Electrical I	5
AUT	170	General Automotive *or*	
AUT	174	Applied Mechanics (Auto)	4
AUT	273	Transmissions I	5
			19

Phase II

AUT	215	Automotive Management	3
AUT	274	Transmissions II	5
AUT	277	Advanced Specialization	5
MTH	114	Applied Math I or higher level Math	3
			16

Total Hours for Certificate 35

Automotive courses:

AUT	175	Braking Systems	5
AUT	176	Suspension & Alignment	5
AUT		Elective or EWE 220	3-5
			13-15

For A.A.S. Degree add the following:
• general education courses listed below.*

Total Hours for A.A.S. degree 63-65

Under The Car Technician

(Certificate & A.A.S.)
Codes 24AY & 24AJ

These programs prepare the student for employment in diagnosing, testing, and repairing brakes, suspension and alignment, and driveline systems.

Phase I

AUT	170	General Automotive ***or***	
AUT	174	Applied Mechanics (Auto)	4
AUT	175	Braking Systems	5
AUT	273	Transmissions I	5
MTH	114	Applied Math I or higher level Math	3
			17

Phase II

AUT	176	Suspension & Alignment	5
AUT	215	Automotive Management	3
AUT	277	Advanced Specialization	5
			13

Total Hours for Certificate 30

Automotive courses:

AUT	171	Engine Rebuilding	5
AUT	172	Auto Electrical I	5
AUT	274	Transmissions II	5
AUT		Elective or EWE 220	3-4-5
			18-20

For A.A.S. Degree add the following:
• general education courses listed below.*

Total Hours for A.A.S. degree 63-65

*** General Education Courses** 15

Communication Arts 6
Suggestions: ENG 120 or ENG 121 and SPE 111 or SPE 121

Social & Behavioral Science 6
Suggestions: SOC 121, ECO 110, PSY 121, PSY 122, PSC 121, HST 221

Humanities & Fine Arts 3

Automotive Air Conditioning and Heating Specialist

(Certificate)
Code 24UG

This Mini Certificate would prepare a student for initial employment diagnosing and repairing automotive heating and air conditioning systems.

AUT	174	Applied Mechanics (Auto)	4
AUT	170	General Automotive ***or***	
AUT	174	Applied Mechanics (Auto)	4
AUT	172	Auto Electrical I	5
AUT	275	Air Conditioning and Heating	5
		Total Hours	14

Automotive Electrical Specialist

(Certificate)
Code 24UH

This Mini Certificate would prepare a student for employment diagnosing and repairing chassis and body electrical and electronic circuits.

AUT	170	General Automotive ***or***	
AUT	174	Applied Mechanics (Auto)	4
AUT	172	Auto Electrical I	5
AUT	173	Auto Electrical II	5
		Total Hours	14

Automotive Fuel Systems Specialist

(Certificate)
Code 24UI

This Mini Certificate would prepare a student for initial employment diagnosing and repairing automotive engine fuel system problems.

AUT	170	General Automotive *or*	
AUT	174	Applied Mechanics (Auto)	4
AUT	271	Fuel Systems I	5
AUT	272	Fuel Systems II	5
		Total Hours	14

Automotive Service Specialist

(Certificate)
Code 24UJ

This Mini Certificate would prepare a student for initial employment in the automotive service industry.

AUT	170	General Automotive *or*	
AUT	174	Applied Mechanics (Auto)	4
AUT	171	Engine Rebuilding	5
AUT	172	Auto Electrical I	5
		Total Hours	14

Automotive Brakes and Suspension Specialist

(Certificate)
Code 24UJ

This Mini Certificate would prepare a student for initial employment diagnosing and repairing automotive braking, suspension and alignment problems.

AUT	170	General Automotive *or*	
AUT	174	Applied Mechanics (Auto)	4
AUT	175	Braking Systems	5
AUT	176	Suspension and Alignment	5
		Total Hours	14

Automotive Oil Change Specialist

(Certificate)
Code 24UL

This Mini Certificate would prepare a student for employment in the oil change business.

AUT	170	General Automotive *or*	
AUT	174	Applied Mechanics (Auto)	4
AUT	171	Engine Rebuilding	5
AUT	273	Transmissions I	5
		Total Hours	14

Automotive Service Specialist

(Certificate)
Code 24UM

This Mini Certificate would prepare a student for initial employment diagnosing and repairing manual transmission, automatic transmission and driveline problems.

AUT	170	General Automotive *or*	
AUT	174	Applied Mechanics (Auto)	4
AUT	273	Transmissions I	5
AUT	274	Transmissions II	5
		Total Hours	14

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Automotive Technology

Name	Office	Phone Number
Rod Cummins	1201	(847) 543-2508
Roger Garross	1201	(847) 543-2509

BUILDING CONSTRUCTION TECHNOLOGY

(Associate in Applied Science)
Plan 24BA
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This program prepares the graduate for employment in the building construction and the building industry.

First Semester

MTH	117	Technical Math I or higher level Math	3-4
BCT	111	Construction Layout	3
BCT	112	Construction Blueprint Reading	3
BCT	113	Construction Materials	3
ENG	121	English Composition I *or*	
ENG	120	Technical Composition I	3
			15-16

Second Semester

BCT	117	Construction Methods	3
BCT	118	Mechanical and Electrical Equipment	3
ARC	121	Architectural Graphics *or*	
ARC	171	Architectural Working Drawings	3
BCT	119	Specifications and Building Codes	3
SPE	111	Communications II or SPE 121	3
			15

Third Semester

BCT	213	Construction Law & Documents	3
BCT	214	Construction Estimating	3
CIV	112	Heavy Construction Methods *or*	
BCT	212	Principles of Heavy Construction	3
ECO	110	Economics for Business & Industry	3
		Construction Elective*	3
			15

Fourth Semester

CIV	214	Soils and Foundations	3
BCT	211	Job Scheduling and Control	3
BCT	215	Construction Management	3
PSY	122	Psychology in Business & Industry	3
		Construction Elective*	3
		Humanities & Fine Arts Elective	3
			18

Total Hours 63-64

***Construction Electives:**

ARC	121	Architectural Graphics	3
ARC	171	Architectural Working Drawings	3
CAD	110	CAD/CAM Concepts	3
CAD	117	Introduction to AutoCAD	3
CAD	177	Site Plan Drafting	3
CIV	111	Surveying I	3
CIV	113	Construction Inspection	3
CIV	211	Surveying II	3
CIV	213	Subdivision Planning & Design	3
CIS	119	Introduction to Office Software	3
EWE	220	Cooperative Work Experience I	1-4
IMR	113	Plumbing & Pipefitting I	3
IMR	114	Plumbing & Pipefitting II	3
IMR	115	Carpentry I	3
IMR	116	Carpentry II	3
ISE	110	Industrial Electricity	2

* and other technical electives as approved by advisor.

Building Construction Technology

(Certificate)
Plan 24BF

Twenty-two semester-hours must be completed for the certificate in Building Construction Technology. Courses are to be selected from the following. Substitutions may be made with division approval.

ARC	121	Architectural Graphics	3
ARC	171	Architectural Working Drawings	3
BCT	118	Mechanical and Electrical Equipment	3
BCT	119	Specifications & Building Codes	3
BCT	213	Construction Law & Documents	3
BCT	214	Construction Estimating	3
BCT	117	Construction Methods	3
BCT	111	Construction Layout	3
BCT	112	Construction Blueprint Reading	3
BCT	113	Construction Materials	3
BCT	211	Job Scheduling and Control	3
BCT	215	Construction Management	3
CAD	117	Introduction to AutoCAD	3
CIV	111	Surveying I	3
CIV	113	Construction Inspection	3
MTH	117	Technical Mathematics I or higher level Math	4
PSY	122	Psychology in Business and Industry	3
		Total Hours	22

For more information on this course of study students may contact the division office or the following faculty member.

Name	Office	Phone Number
Rob Twardock	A220a	(847) 543-2903

BUSINESS MANAGEMENT

(Associate in Applied Science)
Business Division,
Room A143, (847) 543-2041

This program is designed for students interested in entry and middle level management positions. It uses the umbrella concept with a common core of 39 semester hours. Associate degree and/or certificate options are available in Marketing, and Supervision.

General Education Requirements

Communications:

ENG	121	English Composition I	3
AOS	111	Business Communications *or*	
ENG	126	Advanced Composition	3

Social Science

ECO	110	Economics for Business and Industry *or*	
ECO	221	Principles of Economics I	3
PSY	122	Psychology in Business and Industry *or*	
PSY	121	Introduction to Psychology	3

Speech

SPE	128	Interviewing Practices *or*	
SPE	121	Fundamentals of Speech *or*	
SPE	111	Communications II	3

Mathematics

AOS	122	Business Mathematics *or*	
MTH	122 or higher level math		3-4

Humanities

	Elective	3
	(HUM 127 or PHI 125 recommended)	
		21-22

General Business Required Courses

BUS	121	Introduction to Business	3
ACC	112	Accounting Procedures I *or*	
ACC	121	Financial Accounting	3-4
BUS	111	Fundamentals of Finance *or*	
ACC	122	Managerial Accounting	3-4
BUS	221	Business Law I	3
BUS	223	Principles of Management	3
CIS	120	Introduction to Computers	3
CIS	119	Introduction to Office Software	3
			18-20

Specialty Option: Supervision or Marketing	15
Electives: (ACC, BUS, CIS, MCD, MFG, SPE, EWE 220 - 4-credit limit)	6
Total hours	60-63

Specialty Options - Marketing (Plan 22BC)

BUS	122	Principles of Marketing	3
BUS	212	Industrial Marketing	3
BUS	214	Advertising	3
BUS	213	Principles of Salesmanship	3
BUS	299	Selected Topics in Business *or*	
BUS	114	Training Principles and Practices	3
			15

Specialty Options - Supervision (Plan 22BD)

BUS	115	Supervision	3
BUS	113	Human Resource Management	3
BUS	114	Training Principles and Practices	3
BUS	215	Production and Inventory Control	3
BUS	219	Small Business Management	3
			15

Marketing Certificate

The Marketing certificate prepares students for marketing positions such as sales, promotion, and marketing management.

Marketing • Plan 22BG

BUS	121	Introduction to Business	3
BUS	122	Principles of Marketing	3
BUS	212	Industrial Marketing	3
BUS	213	Principles of Salesmanship	3
BUS	214	Advertising	3
BUS	299	Selected Topics in Business *or*	
BUS	114	Training Principles and Practices	3
BUS	223	Principles of Management	3
		Total hours	21

Supervision Certificate

The Supervision certificate prepare students for various areas of management which require skills in communications, interpersonal relations, and general business operations.

Supervision • Plan 22BK

BUS	115	Elements of Supervision	3
BUS	121	Introduction to Business	3
BUS	113	Human Resource Management	3
BUS	114	Training Principles and Practices	3
BUS	215	Production and Inventory Control	3
BUS	219	Small Business Management	3
BUS	223	Principles of Management	3
		Total hours	21

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Business Management

Name	Office	Phone Number
James Paradiso	A139	(847) 543-2525
Litsa Press	A137	(847) 543-2921
James Reinemann	A135	(847) 543-2523
Ellen Rubert	A137	(847) 543-2821

CAD-DRAFTING TECHNOLOGY

(Associate in Applied Science)
Plans 24DB, 24DC, 24DD, 2 DE, 24DG, 24DH, 24DJ
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This program prepares students for employment and advancement in Computer Aided Drafting (CAD). CAD Drafters work under the supervision of an engineer or designer creating drawings. With additional education and experience the graduate may advance to designer, checker, or supervisor. Drawings are produced using a variety of CAD/CAM software. Students must choose an area of concentration wtihin the program and follow the courses listed for that option. The options include General, Architectural, Mechanical, Graphics Animation & Presentation, Survey, Electronic, and Systems Operations. See Architectural, Civil, Drafting, Electronics, Mechanical, and Multimedia programs for related fields of study.

First Semester

CAD	110	CAD/CAM Concepts	3
DFT	111	Drafting I	5
MTH	115	Applied Math II *or*	
MTH	117	Technical Math I or higher level math (if Opt 24DG)	3
		Course #1 (See OPTIONS below)	2-3
			13-14

Second Semester

CAD	117	Introduction to AutoCAD	3
DFT	112	Drafting II	5
		Course #2 (See OPTIONS below)	3-4
		Course #3 (See OPTIONS below) (for 24DC-take in Summer Session)	3-4
SPE		SPE 111 *or* SPE 121 *or* SPE 122 *or* SPE 123 *or* SPE 128	3
			17-19

Third Semester

DFT	113	Technical Illustration *or*	
CAD	179	CAD Animation and Rendering *or* Technical Elective*	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
		Course #4 (See OPTIONS below)	3
		Course #5 (See OPTIONS below)	3
		Social & Behavioral Sciences Elective *or* PSC 122, *or* ECO 110 *or* ECO 221	3
			15

Fourth Semester

CAD	217	AutoCAD II	3
		Course #6 (See OPTIONS below)	3
CAD	276	PRO-Engineer II *or* Technical Elective *	3
ARC	228	Architectural History *or* Humanities & Fine Arts Elective	3
		Social & Behavioral Sciences Elective *or* PSC 122, *or* ECO 110 *or* ECO 221	3
			15

CAD-DRAFTING OPTIONS:
Choose one option from the lists below.

General (Option 24DH)

Course#1	MCD	111	Manufacturing Processes	3
Course#2	ELT	111	Electronic Drafting	2
Course#3	ARC	121	Architectural Graphics	3
Course#4	CAD	177	Site Plan Drafting	3
Course#5	CAD	176	Introduction to PRO-Engineer	3
Course#6	CAD	119	Introduction to Microstation	3
			Total hours per option	60

Architecture (Option 24DB)

Course#1	ARC	121	Architectural Graphics	3
Course#2	ARC	170	Architectural Design	3
Course#3	ARC	216	Architectural Illustration	3
Course#4	ARC	171	Architectural Working Drawings	3
Course#5	CAD	214	Architectural Applications	3
Course#6	ARC	271	Architectural Working Drawings II	3
			Total hours per option	61

Survey (Option 24DD)

Course#1	CIV	111	Surveying I	3
Course#2			Technical Elective*	3
Course#3	CIV	211	Surveying II	3
Course#4	CAD	177	Site Plan Drafting	3
Course#5	CAD	119	Introduction to Microstation	3
Course#6	CIV	213	Subdivision Planning	3
			Total hours per option	61

Mechanical (Option 24DC)

Course#1	MTT	210	Machine Shop *or*	
	MTT	112	Machining Principles	3
Course#2	MCD	111	Manufacturing Processes	3
Course#3	CAD	176	Introduction to PRO-Engineer (summer)	3
Course#4	CAD	175	AutoCAD 3D	3
Course#5	MCD	214	Mechanical Design & Drafting	3
Course#6	CAD	211	Mechanical Detailing	3
			Total hours per option	61

Electronic (Option 24DE)

Course#1	ELT	111	Electronic Drafting	2
Course#2	ELT	117	Industrial Digital Electronics I *or*	
	ELT	213	Introduction to Digital Electronics	3-4
Course#3	ELT	170	DC Circuit Fundamentals *and*	
	ELC	172	Applied AC Circuit Theory	4
Course#4	ELT	173	Applied Analog Circuits	3
Course#5	Technical Elective			3
Course#6	CAD	219	Introduction to AutoLISP	3
			Total hours per option	61-62

Systems Operations (Option 24DG)

Course#1	ELT	111	Electronic Drafting	2
Course#2	CIS	119	Introduction to Office Software	3
Course#3	CIS	115	PC Operation Systems	3
Course#4	CIS	112	Introduction to Local Area Networks	3
Course#5	ELT	116	Technical Programming	3
Course#6	CAD	219	Introduction to AutoLISP	3
			Total hours per option	60

Graphics, Animation & Presentations (Option 24DJ)

Course #1	COM	111	Introduction to Multimedia	3
Course #2	ART	222	Computer Art	3
Course #3	ARC	216	Architectural Illustration	3
Course #4	DFT	113	Technical Illustration	3
Course #5	CAD	179	Animation and Rendering	3
Course #6	CAD	279	Animation and Rendering II	3
			Total hours per option	61

Graphics, Animation and Presentations

(Certificate) • Plan 24DK

This advanced certificate is designed for the individual who possesses education or experience in computer aided design (CAD) or graphic arts. The certificate fills the gap between CAD and computer-generated art and provides the graduate with the skills to create sophisticated computer enhanced presentations for use in a variety of applications. Most courses require prerequisites before enrollment.

COM	171	Introduction to Computer Graphics	3
ART	222	Computer Art	3
ARC	216	Architectural Illustration	3
DFT	113	Technical Illustration	3
CAD	179	Animation and Rendering	3
CAD	279	Animation and Rendering II	3
COM	111	Introduction to Multimedia *or*	
COM	112	Multimedia Platforms *or*	
COM	115	Internet Fundamentals *or*	
COM	116	Online Publishing *or* Technical Elective*	3
		Total hours	21

* Technical Electives: A broad choice of technical electives is available including EWE 220-Cooperative Work Experience. See an advisor in the CAD department for approval of electives.

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Name	Office	Phone Number
Jerry Digilio	HST 150b	(847) 543-2625
Steve Dulmes	HST 150d	(847) 543-2330

CHEMICAL TECHNOLOGY

(Associate in Applied Science)
Plan 21CA, 21CB
Biological & Health Sciences Division
Room C140, (847) 543-2042.

Technicians normally work under the direction of graduate chemists or chemical engineers. They are employed in various phases of industry in chemical process development, product control, and research. A minimum of 60 semester hours must be completed for an A.A.S. degree in Chemical Technology.

General Requirements for all students:

SPE		Speech Communications (Choose from SPE 111, SPE 121, SPE 122, SPE 123, or SPE 128)	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
		Social & Behavioral Sciences Electives	6
		Humanities & Fine Arts Elective	3
MTH	122	College Algebra *and*	
MTH	222	Elementary Statistics	8
			23

Core Courses ***(required for both Chemical Technology degree options)***

CHM	121	General Chemistry I	5
CHM	123	General Chemistry II	5
CHM	125	Elementary Organic Chemistry *or*	
CHM	222	Organic Chemistry I *and*	
CHM	223	Organic Chemistry II	5-10
CHM	221	Analytical Chemistry	5
PED	228	First Aid	2
			22-27

Choose one of the following options:

Chem-Tech Option (Plan 21CA)

PHY	121	General Physics I *and*	
PHY	122	General Physics II	10
		General Electives	7
			17

Bio-Tech Option (Plan 21CB)

BIO	121	General Biology I	4
BIO	124	Anatomy and Physiology	5
BIO	125	Introduction to Microbiology	4
		General Electives	2
			15

Total Hours for A.A.S 60-67

Chemical Technology

(Certificate) • Plan 21CF

CHM	121	General Chemistry I	5
CHM	123	General Chemistry II *or*	
CHM	125	Elementary Organic Chemistry	5
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
MTH	117	Technical Mathematics I *or*	
MTH	122	College Algebra	3-4
PHY		Physics (Choose from PHY 121 or PHY 123)	5
PED	228	First Aid	2
		General Electives	4
		Social & Behavioral Sciences Elective	3
		Total Hours	30

For more information on this program, students may contact the division office listed or one of the following faculty members:

Name	Office	Phone Number
Don Davis	B234	(847) 543-2309
Darryl Johnson	B234	(847) 543-2877
Anne Loeb	B225	(847) 543-2308
Mary Urban	B235	(847) 543-2876

CISCO NETWORKING

(Certificate)
Plan 22CI
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This program is intended to prepare individuals for the Cisco Certified network Associate exam (CCNA). The program consists of four courses each taught in an eight week format which will allow a student to finish the program in two semesters. Material is presented by CBE (Computer Based Education) written by Cisco and supplemented by laboratory practical experience.

CNA	111	Cisco Networking I	3
CNA	112	Cisco Networking II	3
CNA	113	Cisco Networking III	3
CNA	114	Cisco Networking IV	3
		Total hours	12

These courses are normally taught in an 8 week format and students can enter the sequence at any time. All courses are taught each semester and most students should be able to complete the certificate in one year.

CIVIL TECHNOLOGY

(Associate in Applied Science)
Plan 24VA and 24VB
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This program prepares students to work in water supply, wastewater treatment, civil engineering, and construction industries. They generally assume positions as engineer aides, designer/drafting technicians, surveyors, and inspectors or positions in water operations and wastewater treatment.
Core Courses

MTH	117	Technical Math I *and*	
MTH	118	Technical Math II or higher (MTH 122 & 123)	7-8
PHY	111	Technical Physics I *or*	
PHY	121	General Physics I	4-5
EGR	121	Engineering Graphics	3
ENG	121	English Composition I *or*	
ENG	120	Technical Composition	3
ECO	110	Economics For Business and Industry *or*	
ECO	221	Principles of Economics I	3
SPE	111	Communications II *or*	
SPE	121	Fundamentals of Speech	3
CIV	111	Surveying I	3
CIV	212	Sanitation Systems	4
CIS	119	Introduction to Office Software	3
		Humanities & Fine Arts	3
		Social & Behavioral Sciences	3
		Technical Electives	6
		Core Total	45-47

Design/Construction Option (Plan 24VA)

CIV	213	Subdivision Planning & Design	3
CIV	214	Soils and Foundations	3
CIV	211	Surveying II	3
EGR	115	Applied Mechanics: Statics	3
EGR	215	Mechanics of Materials	3
CAD	117	Introduction to AutoCad *or*	
CAD	119	Introduction to Microstation	3
			18

Environmental Option (Plan 24VB)

WWW	114	Introduction to Water/Wastewater Analysis	3
WWW	117	Intermediate Water/Wastewater Analysis	3
WWW	113	Basic Waterworks Operations *and*	
WWW	119	Intermediate and Advanced Waterworks Operations	
		or	
WWW	112	Fundamentals of Wastewater Treatment *and*	
WWW	116	Intermediate Wastewater Plant Operations	6
Technical Electives			6
			18

(Core plus option) Program Total 63-65

Technical Electives for Design or Environmental Option:

CIV	113	Construction Inspection	3
CIV	215	Special Problems	3
ARC	170	Architectural Design	3
ARC	171	Architectural Working Drawings	3
BCT	113	Construction Materials	3
BCT	114	Materials Testing	2
BCT	117	Construction Methods	3
BCT	118	Mechanical and Electrical Equipment	3
BCT	211	Job Scheduling and Control	3
BCT	212	Principles of Heavy Construction	3
BCT	213	Construction Law and Documents	3
BCT	214	Construction Estimating	3
CAD	117	Introduction to AutoCad	3
CAD	119	Introduction to Microstation	3
CAD	177	Site Plan Drafting	3
CIV	112	Heavy Construction Methods	3
MCS	140	Computer Programming I	3
MCS	141	Computer Science I	4
ELT	116	Technical Programming	3
WWW	111	Maintenance of Mechanical and Electrical Equipment	3
WWW	112	Fundamentals of Wastewater Treatment	3
WWW	113	Basic Waterworks Operations	3
WWW	114	Introduction to Water & Wastewater Analysis	3
WWW	116	Intermediate Wastewater Plant Operations	4
WWW	117	Intermediate Water & Wastewater Analysis	3
WWW	118	Advanced Waterworks Operations	3
WWW	119	Intermediate and Advanced Waterworks Operations	3
WWW	299	Special Topics/WWW	1-3
EWE	220	Cooperative Work Experience I	1-4
EWE	270	Cooperative Work Experience II	3
EGR	122	Descriptive Geometry	3

Technical Electives for Environmental Option only:

- BCT 119, 212, 215
- BIO 120, 121, 122, 125, 211, 221, 225
- CHM 120, 121, 123, 125, 221, 222
- EWE 220, 270
- IMR 110
- PED 228
- RAC 119, 174, 175
- ROB 112

Civil Technology

(Certificate) • Plan 24VF

CIV	111	Surveying I	3
CIV	211	Surveying II	3
CIV	112	Heavy Construction Methods *or*	
BCT	212	Principles of Heavy Construction	3
CIV	113	Construction Inspection	3
CIV	212	Sanitation Systems	4
CIV	213	Subdivision Planning and Design	3
CIV	214	Soils and Foundation	3
MTH	117	Technical Mathematics I	3
		Total Hours	25

For more information on this program, students may contact the division office listed or one of the following faculty member:

Name	Office	Phone Number
Rob Twardock	A220a	(847) 543-2903

COMPUTER INFORMATION SYSTEMS

(Associate in Applied Science)
Plans 22CB, 22CC, 22CD, 22CJ, 22CL, 22CM, 22CN
Business Division, Room A143, (847) 543-2041

The Computer Information Systems degree program provides four specialty options with a common core of general education, business and introductory computer courses. The title of each specialty option indicates the job title or function for which the graduate would be qualified.

The computer technology emphasis of this degree program is a WINDOWS-based programming and software applications environment.

General Education Requirements

SPE	111	Communications II *or*	
SPE	121	Fundamentals of Speech *or*	
SPE	128	Interviewing Practices	3
ENG	121	English Composition I	3
PSY	122	Psychology in Business and Industry *or*	
PSY	121	Intro to Psychology	3

Continued on next page

MTH	122	College Algebra or higher Math *or*	
AOS	122	Business Mathematics	3-4
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective (Recommended HUM 127, PHI 122, or PHI 125)	3
			18-19

Business Courses Required

BUS	121	Introduction to Business	3
ACC	112	Accounting Procedures I *or*	
ACC	121	Financial Accounting	3-4
ACC	113	Financial Statement Analysis *or*	
ACC	122	Managerial Accounting *or*	
BUS	111	Fundamentals of Finance	3-4
			9-11

CIS Courses Required

CIS	120	Introduction to Computers	3
CIS	110	Programming Concepts using Visual Basic *or*	
CIS	113	Programming Concepts using Java	3
			6

Specialty Option: PC/LAN Support Specialist, Java Programmer, C++ Programmer, Web Programmer, Visual Basic Programmer or Microcomputer Applications 27

Total Hours 60-63

Specialty Option - Web Programmer (22CJ)

CIS	112	Introduction to Local Area Network	3
CIS	170	Internet Programming for Business	3
CIS	171	JavaScript/JScript	3
CIS	230	Comprehensive Database	3
CIS	277	Database Concepts	3
CIS	278	Server Side Programming	3
CIS		Programming or Non-programming Electives	9
			27

Specialty Option - Visual Basic Programmer (22CL)

CIS	230	Comprehensive Database	3
CIS	210	Intro to Visual Basic Programming	3
CIS	212	Objects and ActiveX using Visual Basic	3
CIS	213	Enterprise Database Access using Visual Basic	3
CIS	277	Database Concepts	3
CIS		Programming Electives	6
CIS		Programmingor Non-programming Electives	6
			27

Specialty Option - Microcomputer Applications (22CB)

CIS	111	Comprehensive Spreadsheets	3
CIS	210	Intro to Visual Basic Programming	3
CIS	230	Comprehensive Database	3
CIS	231	Managing Microcomputer Systems	3
AOS	113	Comprehensive Word Processing	3
CIS		Electives (Non-programming recommended)	12
			27

Specialty Option - C++ Programmer (22CC)

CIS	230	Comprehensive Database	3
CIS	216	Programming in C++	3
CIS	217	Advanced C++	3
CIS	218	Programming in Visual C++	3
CIS		Programming Electives	6
CIS		Programming or Non-programming Electives	9
			27

Specialty Option - PC/LAN Support Specialist (22CD)

CIS	112	Introduction to Local Area Network	3
CIS	115	PC Operating Systems	3
CIS	231	Managing Microcomputer Systems	3
CIS	232	Teleprocessing	3
CIS	236	LAN Administration	3
ELT	151	PC Hardware Fundamentals	3
CIS		Electives (Non-programming recommended)	6
CIS		Electives OR ELT 152	3
			27

Specialty Option - Java Programmer (22CM)

CIS	170	Internet Programming for Business	3
CIS	230	Comprehensive Database	3
CIS	215	Object Oriented Programming using Java	3
CIS	234	Visual Programming in Java	3
CIS	235	Enterprise Java Development	3
CIS		Programming Electives	6
CIS		Programming or Non-programming Electives	6
			27

Programming Electives

CIS	170	Internet Programming for Business	3
CIS	171	JavaScript/JScript	3
CIS	210	Intro to Visual Basic Programming	3
CIS	211	Introduction to C Programming	3
CIS	212	Objects and ActiveX using Visual Basic	3
CIS	213	Enterprise Database Access using Visual Basic	3
CIS	215	Object Oriented Programming Using Java	3

Continued on next page

CIS	216	Programming in C ++	3
CIS	217	Advanced C++	3
CIS	218	Programming in Visual C ++	3
CIS	234	Visual Programming in Java	3
CIS	235	Enterprise Java Development	3
CIS	250	Introduction to COBOL Programming	3
CIC	256	Comprehensive COBOL	3
CIS	277	Database Concepts	3
CIS	299	Selected Topics in CIS	1-3

Non-programming Electives

CIS	111	Comprehensive Spreadsheets	3
CIS	112	Introduction to Local Area Networking	3
CIS	115	PC Operating Systems	3
CIS	230	Comprehensive Database	3
CIS	231	Managing Microcomputer Systems	3
CIS	232	Teleprocessing	3
CIS	236	LAN Administration	3
CIS	258	Systems Analysis	3
CIS	276	Operating Systems	3
CIS	277	Database Concepts	3
CIS	290	Desktop Publishing	3
CIS	291	CorelDRAW	3
CIS	292	Advanced Desktop Publishing	2
CIS	299	Selected Topics in CIS	1-3
EWE	220	Educational Work Experience (Cooperative Education)	1-3

Desktop Publishing

(Certificate) Plan 22CH

The Desktop Publishing certificate prepares individuals to utilize desktop publishing technologies to integrate graphics and text in producing effective communications. With these desktop publishing skills individuals could be employed as media designers or use this skill as a specialty in a variety of information processing support positions.

ART	111	Printing Production	3
AOS	113	Comprehensive Word Processing	3
AOS	215	Presentation Software	2
CIS	290	Desktop Publishing	3
CIS	292	Advanced Desktop Publishing	2
CIS	291	CorelDRAW	3
		Elective	3
			19

Electives:

AOS	118	Advanced Word Processing/ Desktop Publishing	2
CIS	299	Selected Topics in CIS	1-4
COM	116	Online Publishing	3
ENG	124	Newswriting I	3

Microcomputers for Business

(Certificate) Plan 22CG

The Microcomputers for Business certificate prepares students to apply information technology to solve problems and increase efficiency in the workplace. The certificate develops proficiency in software applications involving data manipulation and management. Through the electives the student can add proficiency in such applications as WINDOWS based programming, desktop publication or graphics.

Business Courses Required

ACC	121	Financial Accounting ***or***	
ACC	112	Accounting Procedures I	3-4
BUS	121	Introduction to Business	3
			6-7

CIS Courses Required

CIS	120	Introduction to Computers	3
CIS	111	Comprehensive Spreadsheets	3
CIS	110	Introduction to Programming using QBASIC	3
CIS	231	Managing Microcomputer Systems	3
CIS	230	Comprehensive Database	3
CIS		Electives (non-programming recommended)	6
			21
		Total Hours	27-28

Computer Information Systems Network Specialist

(Certificate) Plan 22CK

CIS	112	Introduction to Local Area Networking	3
CIS	115	PC Operations Systems	3
CIS	231	Managing Microcomputer Systems	3
CIS	232	Teleprocessing	3
CIS	236	LAN Administration	3
		Electives (Any CIS or ELT 151 and/or ELT 152 recommended)	6
		Total Hours	21

To earn this certificate students must have completed, in addition to the six specialty courses listed above, one of the following:

- Bachelor Degree in Business or Computer Information Systems
- Associate Degree in Business or Computer Information Systems
- Coursework in the following areas:
  - Six hours in Communications (written and oral)
  - Six hours in Social Science
  - Six hours in Problem solving comprised of Mathematics, Logic or Critical Thinking
  - Three hours in Management or Marketing
  - Three hours in Accounting or Finance

PC Technician

(Certificate) Plan 22CI

The PC technician certificate provides career training for students entering the computer technical support field. The skill sets involved in this certificate provides the training for individuals who install, maintain, upgrade and repair PC hardware and software. This certificate helps prepare the student for the A+ Certification exam. Proficiency credit through examination is available for CIS 120 and ELT 170.

CIS	120	Introduction to Computers	3
CIS	115	PC Operating Systems	3
ELT	170	DC Circuit Fundamentals	2
ELT	151	PC Hardware Fundamentals	3
ELT	152	PC Peripherals & Troubleshooting	3
		Total Hours	14

For more information on these courses of study students may contact either the division office listed or one of the following faculty members.

Name	Office	Phone Number
Roger Anderson	A140	(847) 543-2518
Oscar Andrade	A140	(847) 543-2818
Ruth Bond	A138	(847) 543-2820
Dan Dainton	A240	(847) 543-2538
Ellen Dykeman	A137	(847) 543-2521
Carol Mason	A136	(847) 543-2517
John North	A236	(847) 543-2507
Daniel Petrosko	A139	(847) 543-2442

Web Programming

(Certificate) Plan 22CN

The Web Programming Certificate provides students with the necessary skills to begin a career in web development. The student will learn to create web pages and interfaces using client- and server-side programming for the development of web applications. The student will also develop web pages incorporating database applications and components, which will include database administration, security and maintenance. (It is the student's responsibility to meet all prerequisites of required courses in this certificate.)

CIS	170*	Internet Programming for Business	3
CIS	171	JavaScript/JScript	3
CIS	277*	Database Concepts	3
CIS	210*	Introduction to Visual Basic *or*	
CIS	215*	Object Oriented Programming Using Java	3
CIS	278	Server Side Programming	3
		Total Hours	15

*It is the student's responsibility to satisfy prerequisites.

CNC PROGRAMMING

(Associate in Applied Science)
Plan 24NA
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

The Computerized Numerical Control program is designed to provide knowledge and skills needed for employment and advancement in CNC Programming. Programming on the latest FANUC CNC controlled lathes and milling machines. Advanced placement in the program may be arranged for experienced programmers and operators. All machine tool courses are approved by the United States Department of Labor, Bureau of Apprenticeship Training.

Phase I

CNC	110	CNC Operations I	3
EGR	121	Engineering Graphics	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
MTH	115	Applied Math II	3
MTT	112	Machining Principles *or*	
MTT	210	Machine Shop II	3
			15

Phase II

CAD	117	Introduction to AutoCAD	3
CNC	115	CNC Programming I	3
ECO	110	Economics for Business and Industry	3
MTH	117	Technical Mathematics I	3
MTT	211	Jig and Fixture Design	3
			15

Phase III

CAD	175	AutoCAD 3D	3
CNC	215	Mill Programming	3
SPE	111	Communications II	3
		Humanities and Fine Arts Elective	3
		Technical Elective	3
			15

Phase IV

CNC	216	Lathe Programming	3
CNC	217	Introduction to Wire EDM Machining *or*	
EWE	220	Cooperative Work Experience I	3-4
CNC	218	CAD/CAM Numerical Control	3
		Social or Behavioral Sciences Elective	3
		Technical Elective	3
			15-16
		Total Hours	60-61

Technical Electives:
Approval of technical electives must be obtained from the program advisor.

CNC	210	CNC Operations II	2
ELT	116	Technical Programming	3
ELT	117	Industrial Digital Electronics I	3
MTT	116	Introduction to Moldmaking	3
MTT	115	Introduction to Diemaking	3
MCD	111	Manufacturing Processes	3
MFG	210	Manufacturing Materials	3
MFG	215	Manufacturing Analysis	3
MCS	124	Programming in BASIC Language	2
ROB	111	Introduction to Robotics	3

CNC Programming/Operations

(Certificate)
Plan 24NG

This certificate program provides knowledge and skills needed for entry level employment in CNC programming operating. Operations and programming on FANUC CNC controlled machine tools is performed. Advanced placement may be arranged for experienced machinists.

Phase I

CNC	110	CNC Operations I	3
EGR	121	Engineering Graphics	3
MTH	115	Applied Math II	3
MTT	112	Machining Principles *or*	
MTT	210	Machine Shop II	3

Phase II

CNC	115	CNC Programming I	3
CNC	210	CNC Operations II	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
MTT	211	Jig and Fixture Design	3
			12

Phase III

CNC	215	Mill Programming *or*	
CNC	216	Lathe Programming	3
CNC	217	Introduction to Wire EDM Machining	3
			6
		Total Hours	30

CNC Operations

(Certificate)
Plan 24NH

Students are provided the opportunity to learn the operations of a modern industrial CNC controlled vertical mill, turning center, and vertical machining center. Bridgeport, FANUC manual and conversational controls are used.

Phase I

CNC	110	CNC Operations I	3
MTT	110	Machine Trades Blueprint Reading	3
MTT	112	Machining Principles *or*	
MTT	210	Machine Shop II	3
			9

Phase II

CNC	210	CNC Operations II	3
MTH	114	Applied Mathematics I	3
		Total Hours	15

For more information on this course of study students may contact either the division office listed or the following faculty member.

Name	Office	Phone Number
Don Ruesch	TEC150c	(847) 543-2506

CRIMINAL JUSTICE

(Associate in Applied Science)
Plan 25CE
Social Science Division, Room A244, (847) 543-2047

This program is structured to prepare students for a variety of careers in the criminal justice system at local, state, and federal levels. Students can specialize in a number of areas, including law enforcement, criminal investigation, juvenile justice, court services, as well as community-based and institutional corrections. Students pursuing the A.A.S. degree are required to complete twenty-seven credit hours of general education, twenty-one credit hours of criminal justice core courses, and fifteen credit hour of criminal justice electives. All students are urged to consult with a criminal justice advisor in planning their program of study.

General Education Requirements:

ENG	120	Technical Composition I	3
SPE	121	Fundamentals of Speech	3
SOC	121	Introduction to Sociology	3
PSC	121	American National Politics *or*	
PSC	122	State and Local Politics	3
PSY	121	Introduction to Psychology	3
		Humanities & Fine Arts Elective	3
		Science or Math Elective	3
		Total	21

Criminal Justice Core (Required Courses)

CRJ	121	Introduction to Criminal Justice	3
CRJ	111	Introduction to Policing	3
CRJ	123	Introduction to Criminology	3
CRJ	124	Penology and Corrections	3
CRJ	221	Criminal Law	3
CRJ	211	Criminal Procedural Law	3
CRJ	229	Juvenile Delinquency	3
CRJ	270	Criminal Justice Assessment Seminar	3
		Total	24

Criminal Justice Electives (Select 15 credit hours)

CRJ	117	Community-Based Corrections	3
CRJ	118	Evidence Technology	3
CRJ	119	Principles of Direct Supervision	3
CRJ	212	Traffic Law Enforcement	3
CRJ	213	Community Policing	3
CRJ	214	Substance Abuse and Criminal Justice	3
CRJ	215	Issues in Criminal Justice	3
CRJ	216	Police Management and Supervision	3
CRJ	218	Criminal Justice Internship	3
CRJ	219	Principles of Criminal Investigation	3
CRJ	220	Independent Research	3
HUX	170	Introduction to Substance Abuse	3
HUS	112	Community Social Services	3
EWE	220	Cooperative Work Experience I	3
EWE	270	Cooperative Work Experience II	3
SOC	222	Social Problems	3
SOC	223	Deviance	3
		Total Hours	60

Criminal Justice

(Certificate)
Plan 25CF

CRJ	121	Introduction to Criminal Justice	3
CRJ	123	Introduction to Criminology	3
SOC	121	Introduction to Sociology	3
PSY	121	Introduction to Psychology	3
CRJ	221	Criminal Law	3
		Approved Criminal Justice Courses	15
		Total Hours	30

Faculty who teach in this subject area are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
Roger Voltz	D118	(847) 543-2468
Thomas Arnold	D118	(847) 543-2944

DATA PROCESSING

See Computer Information Systems on page 100.

DENTAL HYGIENE

(Associate in Applied Science)
Plan 21DH
Biological & Health Sciences Division
Room C140, (847) 543-2042.

Dental hygienists are licensed professionals who are a vital part of a dental health team. Dental hygienists provide oral health assessment, disease prevention, and health promotion. They serve individuals and families within the community. The purpose of the dental hygiene program at the College of Lake County is to prepare students to develop the competencies that are needed to present extensive, preventive oral health care services to the community.

The Dental Hygiene program has been granted accreditation eligible status by the American Dental Association.

To find out details about applying for the program, call Lori Drummer, Dental Hygiene Coordinator at (847) 543-2638. You must attend an Information Session to apply to the program and to learn other specifics of the application process.

Preference will be given to residents of Community College District 532 (including other community college districts with which CLC has a Joint Educational Agreement).

1. **Submit the following records to the Admission and Records Office:**
   A. Application for admission to the college.
   B. Dental Hygiene request for screening
   C. Application to the Dental Hygiene program
   D. Official transcript (sent directly to CLC from appropriate institution) of your record from the last high school you attended. If you did not or will not graduate from high school, you must submit a copy of your High School Equivalency (GED) test report.
   E. Official transcripts from any previous college(s) showing course work relevant to the Dental Hygiene selection criteria, sent directly to CLC by the colleges.

2. **Minimum Selection Criteria: Your records must indicate that you satisfy the following:**
   A. High school graduate or the equivalent
   B. Demonstrate language and math proficiency.
   C. Successful completion of the two prerequisite courses, BIO 121 and CHM 120 (or CHM 121), with a grade of "C" or better.
   D. Attendance at a Dental Hygiene Program Information Session.
   E. Completion of the Health Occupations Aptitude Test
   G. Students who have completed any of the following courses (or an equivalent) must have obtained a grade of "C" or better. (These courses are not prerequisites. They are program requirements, but may be taken prior to acceptance into the program.)
   - BIO 124- Anatomy and Physiology
   - BIO 125- Introduction to Microbiology

Note: A student must maintain at least a grade of "C" in each Dental Hygiene course to continue in and graduate from the program.

Summer Session

BIO	124	Anatomy and Physiology	5
ENG	121	English Composition	3
			8

First Semester

BIO	125	Introduction Microbiology	4
DHY	111	Principles in Dental Hygiene I	2
DHY	113	Preclinical Dental Hygiene	2
DHY	115	Head and Neck Anatomy (histology)	3
DHY	117	Dental Anatomy	2
DHY	119	Nutrition & Biochemistry	2
DHY	171	Preventive Dental Hygiene	1
			16

Second Semester

DHY	112	Principles in Dental Hygiene II	2
DHY	114	Clinical Dental Hygiene I	2
DHY	116	Dental Radiology I	3
DHY	118	General and Oral Pathology	2
DHY	172	Medical Emergencies	1
DHY	174	Introduction to Periodontics	2
DHY	176	Dental Materials & Expanded Functions	3
			15

Summer Session

DHY	178	Review of Dental Literature	1
DHY	179	Clinical Dental Hygiene II	2
		Speech Elective	3
			6

Third Semester

DHY	219	Advanced Periodontics	2
DHY	217	Dental Pharmacology & Anesthetic	2
DHY	215	Dental Radiology II	1
DHY	271	Community Dentistry I	2
DHY	211	Theory and Practice of Dental Hygiene I	2
DHY	213	Clinical Dental Hygiene III	3
PSY	121	Introduction to Psychology	3
DHY	273	Applied Radiology	2
			17

Fourth Semester

DHY	216	Ethics & Jurisprudence and Practice Man.	2
DHY	218	Dental Radiology III	1
DHY	274	Advanced Dental Hygiene	2
DHY	212	Theory and Practice of Dental Hygiene II	1
DHY	214	Clinical Dental Hygiene IV	3
DHY	272	Community Dentistry II	1
SOC	121	Introduction to Sociology	3
Humanities Elective			3
			16
		Total Hours	78

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Drafting

Name	Office	Phone Number
Patty Boudreau	D221	(847) 543-2307
Lorri Drummer	D221	(847) 543-2638

DRAFTING

(Certificate)
Plan 24DI
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This program prepares students to work as junior and senior drafters in a variety of area industries from electronics to motor vehicles to health care laboratories. Graduates typically work in the engineering departments under the supervision of an engineer or designer making revisions or preparing new drawings from sketches using pencil, ink, or computer aided drafting systems. Drafters can advance to designer, checker, or supervisor with additional education or experience. NOTE: An A.A.S. degree in CAD-Drafting Technology is also available. See page 97.

First Semester

DFT	111	Drafting I	5
		Electives	9
			14

Second Semester

DFT	112	Drafting II	5
		Electives	12
			17
		Total Hours	31

Electives - 21 Hours

ARC	121	Architectural Graphics	3
CAD	110	CAD-CAM Concepts	3
CAD	117	Introduction to AutoCAD	3
CAD	119	Introduction to Microstation	3
CAD	175	AutoCAD 3D	3
CAD	176	Introduction to PRO-Engineer	3
CAD	177	Site Plan Drafting	3
CAD	179	CAD Animation & Rendering	3
CAD	217	Auto CAD II	3
CAD	276	PROEngineer II	3
CAD	279	CAD Animation & Rendering II	3
DFT	113	Technical Illustration	3
ELT	111	Electronic Drafting	2
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
EGR	122	Description Geometry	3
EWE	112	Cooperative Work Experience	2-4
MCD	111	Manufacturing Processes	3
MCD	112	Basic Metallurgy I	3
MCD	114	Dimensional Metrology	3
MCD	214	Mechanical Design & Drafting	3
MTH	115	Applied Math or higher	3-4
MTT	111	Machine Shop I	3
MTT	112	Machining Principles	3

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Drafting

Name	Office	Phone Number
Jerry Digilio	HST 150b	(847) 543-2625
Steve Dulmes	HST 150d	(847) 543-2330

EARLY CHILDHOOD EDUCATION

(Associate in Applied Science)
Plan 25EA
Social Science Division, Room A244, (847) 543-2047

The Associate of Applied Science Degree Program in Early Childhood Education prepares students for careers working with young children. Graduates of the program are DCFS qualified to be lead teachers in and directors of day care centers, nursery schools, preschools, and school-age programs. Public school Pre-K programs employ A.A.S. degree graduates as assistant teachers. The program is designed to qualify graduates for the Director I Credential of the Illinois Network of Child Care Resource and Referral Agencies. Many of the courses transfer to four year institutions with related programs

General Education Requirements:

ENG	121	English Composition I	3
SPE	111	Communications II *or*	
SPE	121	Fundamentals of Speech *or*	
SPE	128	Interviewing Practices	3
PSY	121	Introduction to Psychology	3
SOC	121	Introduction to Sociology	3
PSY	222	Child Growth and Development	3
		Humanities & Fine Arts Elective	3
		MTH 121 *or* higher *or* Science Elective	3
		Total	21

Early Childhood Education Core (Required Courses)

HUS	111	Health and Nutrition	3
HUS	112	Community Social Services	3
HUS	118	Professional Helping Skills	3
HUX	170	Introduction to Substance Abuse	3
ECE	116	Creative Activities I	3
ECE	119	Language Development *and* Activities for Young Children	3
ECE	214	Group Care of Infants and Toddlers	3
ECE	221	Principles of Early Childhood Education	3
ECE	223	Child, Family, and Community	3
ECE	232	Math and Science for Young Children	2
ECE	270	Administration of Early Childhood Programs	3
EDU	120	Observation/Guidance of Children	2
EDU	222	The Exceptional Child	3
ECE	271	Early Childhood Education Practicum I	4
ECE	272	Early Childhood Education Practicum II	4

Early Childhood Education Electives
(Select at least 2 credit hours)

ECE	115	Music Activities for Young Children	2
ECE	131	The Special Needs Child in ECE	3
ECE	231	School-Age Programming	3
EDU	299	Special Topics in Education	1-3
		Total	47
		Total Hours	68

Early Childhood Education

(Certificate) • Plan 25EB

The certificate program is intended for students who already hold degrees or who have taken extensive coursework in other academic fields. The certificate provides the additional study that is often required when there has been a career change.

PSY	121	Introduction to Psychology	3
ENG	121	English Composition I	3
PSY	222	Child Growth and Development	3
HUS	111	Health and Nutrition	3
ECE	116	Creative Activities	3
ECE	119	Language Development and Activities	3
EDU	120	Observation and Guidance of Children	2
ECE	214	Group Care of Infants and Toddlers	3
ECE	221	Principles of Early Childhood Education	3
EDU	222	The Exceptional Child	3
ECE	223	Child, Family, and Community	3
		Total Hours	32

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Name	Office	Phone Number
Carol Huntsinger	D120	(847) 543-2742

ELECTRICIAN APPRENTICESHIP

(Associate in Applied Science) • Plan 24EG
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

First Year - First Semester

EMF	111	Electronics Mathematics I	2
EMF	112	Electronics Mathematics II	2
ELT	170	DC Circuit Fundamentals	2
ISE	114	National Electrical Code	2
EAP	111	Electrician Apprenticeship Work Experience I	2
			10

First Year - Second Semester

ELT	111	Electronic Drafting	2
ELC	113	Basic Instrumentation & Shop Practice	3
EAP	111	Electrician Apprenticeship Work Experience II (Continued from 1st semester)	
			5

Second Year - First Semester

BCT	112	Construction Blueprint Reading	3
ELC	172	Applied AC Circuit Theory	2
EAP	112	Electrician Apprenticeship Work Experience II	2
			7

Second Year - Second Semester

ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
ISE	118	Power Distribution	3
EAP	112	Electrician Apprenticeship Work Experience II (Continued from 1st semester)	
			6

Third Year - First Semester

ELT	173	Applied Analog Circuits	3
SPE	111	Communications II *or*	
SPE	121	Fundamentals of Speech	3
EAP	113	Electrician Apprenticeship Work Experience III	2
			8

Third Year - Second Semester

ELC	114	Motor and Machine Controls	3
ELC	276	Electrical Industrial Safety	1
BCT	118	Mechanical and Electrical Equipment	3
EAP	113	Electrician Apprenticeship Work Experience III (Continued from 1st semester)	
			7

Fourth Year - First Semester

ELC	211	Electrical Machines	3
ELC	171	Programmable Logic Controllers	3
EAP	114	Electrician Apprenticeship Work Experience IV	2
			8

Fourth Year - Second Semester

		Social Science Elective	3
ELT	117	Industrial Digital Electronics I	3
EAP	114	Electrician Apprenticeship Work Experience IV (Continued from 1st semester)	
			6

Fifth Year - First Semester

CAD	117	Introduction to AutoCAD	3
ARC	228	History of Architecture	3
EAP	115	Electrician Apprenticeship Work Experience V	2
			8

Fifth Year - Second Semester

ELT	172	Industrial Control Systems	3
EAP	115	Electrician Apprenticeship Work Experience V (Continued from 1st semester)	
			3
		Total Hours	68

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Name	Office	Phone Number
Tony Gundrum	B140	(847) 543-2489

ELECTRONICS ENGINEERING TECHNOLOGY

(Associate in Applied Science)
Plan 24ED
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

Students are prepared to work in research, electronic layout, instrumentation, design, field service, communications and service laboratories.

First Semester (Fall)

ELT	111	Electronic Drafting	2
ELT	170	DC Circuit Fundamentals	2
ELC	173	DC Analysis-Network Theorems	2
MTH	117	Technical Mathematics I*	3
ELT	116	Technical Programming	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
			15

Second Semester (Spring)

ELT	213	Introduction to Digital Electronics	4
ELC	174	AC Fundamentals	2
ELC	175	AC Analysis & Circuit Theorems	2
MTH	118	Technical Mathematics II*	3-4
SOC	121	Introduction to Sociology	3
		Humanities & Fine Arts Elective	3
			17-18

Third Semester (Fall)

ELT	113	Transistor Electronics	4
ELT	216	Microprocessors I	3
MTH	211	Technical Mathematics III*	3-5
PHY	120	Practical Aspects of Physics*	4
SPE	111	Communications II *or*	
SPE	121	Fundamentals of Speech	3
			17-19

Fourth Semester (Spring)

ELT	115	Electronic Laboratory Techniques *or* approved technical elective	2
ELT	211	Advanced Solid State Electronics	3
ELT	212	Electronic Communication Systems	3
ELT	217	Microprocessors II	3
ECO	110	Economics for Business & Industry *or*	
ECO	221	Principles of Macroeconomics	3
			14
		Total Hours	63-67

*For Students who wish to pursue a Bachelor Degree in Engineering Technology these courses may be substituted:

MTH 122 College Algebra, MTH 123 Trigonometry, MTH 144, Pre-Calculus, MTH 145, Calculus, PHY 121 General Physics

Please see an advisor in the Electronics area before selecting these courses.

Electronics Technology

(Certificate)
Plan 24EF

A minimum of 34 semester hours credit must be completed for the certificate. Although courses are generally selected from the following, other subjects may be taken as part of a program with division approval.

PHY	120	Practical Aspects of Physics or higher level physics	4
MTH	117	Technical Mathematics I or higher level Math	3-4
MTH	118	Technical Mathematics II or equivalent or higher level Math	4
ELT	111	Electronic Drafting	2
ELT	170	DC Circuit Fundamentals **and**	
ELC	173	DC Analysis-Network Theorems	4
ELC	174	AC Fundamentals **and**	
ELC	175	AC Analysis & Circuit Theorems	4
ELT	113	Transistor Electronics	4
ELT	116	Technical Programming	3
ELT	211	Advanced Solid State Electronics	4
ELT	212	Electronic Communications Systems	3
ELT	213	Introduction to Digital Electronics	4
ELT	216	Microprocessors I	3
ELT	217	Microprocessors II	3
ELT	271	Circuit Analaysis Computer Techniques	3
ELT	272	Circuit Analaysis Techniques	3
		Total Hours	34

For more information on this course of study students may contact either the division office listed above or one of the following faculty members.

Electronics Technology

Name	Office	Phone Number
Tony Gundrum	B140	(847) 543-2489
Jack Hudson	B117½	(847) 543-2902
Greg Morris	B140	(847) 543-2905

Electrical/Electronic Maintenance

(Certificate)
Plan 24EH
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This program is intended to provide students with skills necessary to perform trouble-shooting and maintenance procedures in industry. Students with experience in the field and demonstrating appropriate knowledge may be given advanced standing in the program.

First Semester (Fall)

ELT	170	DC Circuit Fundamentals	2
ELC	172	Applied AC Circuit Theory	2
ELT	117	Industrial Digital Electronics I	3
ELC	113	Basic Instrumentation and Shop Practices	2
MTH	114	Applied Mathematics or MTH117 or higher level math	3-4
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
			15-16

Second Semester (Spring)

ELT	118	Industrial Digital Electronics II	3
ELT	171	Industrial Control Systems	3
ELT	172	Applied Communication Systems	3
ELT	173	Applied Analog Circuits	3
		Technical Elective	3-4
			15-16
		Total Hours	30-32

Technical Electives may be selected from the following:
- CNA 111 - Cisco Networking
- CNA 112 - Cisco Networking II
- CNA 113 - Cisco Networking III
- CNA 114 - Cisco Networking IV
- ELC 114 - Motor and Machine Control
- ELC 171 - Programmable Logic Controllers
- ELC 211 - Electrical Machinery
- ELC 215 - Power Transmission and Distribution
- ELT 151 - PC Hardware Fundamentals
- ELT 152 - PC Peripherals & Troubleshooting
- ROB 111 - Introduction to Robotics

For more information on this course of study students may contact either the division office listed above or one of the following faculty members.

Electrical/Electronic Maintenance

Name	Office	Phone Number
Tony Gundrum	B140	(847) 543-2489
Jack Hudson	B117½	(847) 543-2902
Greg Morris	B140	(847) 543-2905

PC Technician

(Certificate) Plan 22CI

The PC technician certificate provides career training for students entering the computer technical support field. The skill sets involved in this certificate provides the training for individuals who install, maintain, upgrade and repair PC hardware and software. This certificate helps prepare the student for the A+ Certification exam. Proficiency credit through examination is available for CIS 120 and ELT 170.

CIS	120	Introduction to Computers	3
CIS	115	PC Operating Systems	3
ELT	170	DC Circuit Fundamentals	2
ELT	151	PC Hardware Fundamentals	3
ELT	152	PC Peripherals & Troubleshooting	3
		Total Hours	14

For more information on these courses of study students may contact either the division office listed or the following faculty member.

Name	Office	Phone Number
Greg Morris	B140	(847) 543-2905

ELECTRONICS MANUFACTURING TECHNOLOGY

(Associate in Applied Science)
Plan 24EM
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

The Electronics Manufacturing Technology program is designed to address the shortage of skilled electronics technicians. This regional degree meets national skill standards for electronic technical skills. Interested Motorola employees should contact their supervisors about enrolling in the program.

Required General Education Courses

ECO	110	Economics for Business and Industry	3
EMF	111	Electronics Math I	2
EMF	112	Electronics Math II	2
EMF	113	Electronics Math III	2
EMF	114	Electronics Math IV	2
ENG	120	Technical Composition I	3
		Humanities Elective	3
PHY	115	Applied Physics for Electronics I	3
PHY	116	Applied Physics for Electronics II	3
SPE	111	Communications II *or*	
SPE	121	Fundamentals of Speech	3

Required Core Courses

EMF	132	Technical Programming I	1.5
EMF	133	Technical Programming II	1.5
EMF	134	Digital Electronics I	2
EMF	135	Digital Electronics II	2
EMF	136	DC Circuit Analysis I	2.5
EMF	137	DC Circuit Analysis II	2.5
EMF	170	Electronics Manufacturing Internship I	2
EMF	171	Electronics Manufacturing Internship II	1
EMF	172	Electronics Manufacturing Internship III	2
EMF	230	AC Circuit Analysis I	2
EMF	231	AC Circuit Analysis II	2

Continued on next page.

EMF	232	Linear Devices I	2
EMF	233	Linear Devices II	2
EMF	234	Microprocessors I	2
EMF	235	Microprocessors II	2
EMF	236	Microprocessors III	2
EMF	237	Microprocessors IV	2
EMF	238	Electronic Communications Systems I	2
EMF	239	Electronic Communications Systems II	2
EMF	250	Linear Devices III	2
EMF	251	Linear Devices IV	2
		Total Hours	67

For more information on this course of study students may contact either the division office listed above or one of the following faculty members.

Electronics Manufacturing Technology

Name	Office	Phone Number
Tony Gundrum	B140	(847) 543-2489

EMERGENCY MEDICAL SERVICES

Biological & Health Sciences Division
Room C140, (847) 543-2042

Emergency Medical Technician - Basic

(Certificate) • Plan 21EM

Emergency medical technicians provide emergency medical care for illness and injury at the site and in route to the hospital. They provide pre-hospital and inter-hospital emergency medical services and medical transport services at the basic life support level. Graduates are employed primarily by ambulance services, and by fire and rescue departments. Graduates will understand the emergency services system, the responsibilities of emergency services personnel, as well as assessment, stabilization and initial pre-hospital medical treatment of injured and ill patients. Completion of this certificate prepares students to take the licensing examination of the Illinois Department of Public Health to become an EMT-B (Emergency Medical Technician-Basic). Courses are offered at associated hospitals and fire/rescue departments in Lake County.

EMT	111	Emergency Medical Technician-Basic	7
		Total Hours	7

Emergency Medical Technician - Paramedic

(Certificate) • Plan 21EP

Paramedics provide emergency medical care for illness and injury at site and en route to hospital. Paramedics are trained to provide pre-hospital and inter-hospital emergency medical services and medical transport services at the advanced life support level, including administration of intravenous lines, intubation, and defibrillation. Paramedics are employed primarily by fire and rescue departments and by ambulance services. Students entering this program must have already earned the EMT-B or EMT-I license. Completion of this certificate prepares students to take the licensing examination of the Illinois Department of Public Health to become an EMT-P (Emergency Medical Technician-Paramedic). Courses are offered at associated hospitals in Lake County.

EMT	113	EMT Paramedic-Classroom/ Lab Experience	11
EMT	114	EMT Paramedic-Clinical Practicum	2
EMT	115	EMT Paramedic-Field Experience Practicum	2
		Total Hours	15

FIRE SCIENCE TECHNOLOGY

(Associate in Applied Science)
Plan 24FB
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

Fire Science Technology is a career program that leads to an Associate in Applied Science Degree. It is designed to serve the needs of students in the Fire Service, and to prepare others to enter the service.

Many of the Fire Science courses are articulated with the Office of the State Fire Marshal and count toward the requirements for INSTRUCTOR I, INSTRUCTOR II, FIRE OFFICER I, FIRE OFFICER II, APPARATUS ENGINEER, AND HAZMAT 1ST RESPONDER.

General Education Requirements

ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
SPE		(SPE 111, 121, 122, 123, or 128)	3
PSY	121	Introduction to Psychology	3
PSC	122	State and Local Government	3
PHY	120	Practical Aspects of Physics (or higher level)	4
		Humanities electives	6

Continued on next page.

MTH	(The mathematics requirement may be met by completing one of the following sequences.)	
	MTH 114 & 115 Applied Mathematics I & II	6
	MTH 117 & 118 Technical Mathematics I & II	8
	MTH 122 & 123 College Algebra, Trigonometry	7
	MTH 144 Precalculus	5
	MTH 127 & 222 Finite Mathematics & Elementary Statistics	7
	MTH 141 Quantitative Literacy and CIS 120 Introduction to Computers *or* CIS 119 Introduction to Office Software	6
	Total General Education	27-30

Note: Only those mathematics courses numbered 122 or higher will meet the core requirements for Fire Science Management degree at SIU.

Required Fire Science Courses

FST	116	Tactics and Strategy I	3
FST	173	Fire Instructor I	3
FST	177	Fire Prevention Principles I	3
FST	218	Fire Officer Supervision (MGMT I)	3
FST	217	Fire Officer Communications (MGMT II)	3
		Total (required FST)	15

Fire Science Electives - 18 Credit Hours

Pick six courses from the following:

FST	111	Intro to Fire Science (Not for active firemen)	3
FST	117	Tactics and Strategy II	3
FST	119	Fire Apparatus Engineer	3
FST	174	Fire Instructor II	3
FST	273	Fire Science Business & Operations (MGMT III)	3
FST	274	Fire Administration & The Law (MGMT IV)	3
FST	192	Hazardous Materials First Responder	3
FST	118	Incident Command	3
FST	279	Special Topics in the Fire Service	3
		Total FST Electives-	18 hrs.
		Total Hours	60

For more information on this course of study students may contact the division office listed above.

FOOD SERVICE

(Associate in Applied Science)
Plan 22FB
Business Division, Room A143, (847) 543-2041

The Food Service program is designed to provide students with technical skills in food preparation, food operations and food service management.

Food Service Management is designed to prepare students for managerial positions in the food service industry. It emphasizes course work in business management and supervision, food service operations and sufficient food preparation to manage kitchen activities. Students selecting this option would be preparing for such positions as food service supervisor, manager in a chain or independent restaurant, owner-manager, catering manager or managerial positions with food and food equipment manufacturers.

Food Service Management (22FB)

First Semester

FSM	110	Introduction to Professional Food Service	3
FSM	111	Principles of Food Preparation I	4
FSM	113	Applied Food Service Sanitation	1
BUS	121	Introduction to Business	3
ENG	121	English Composition I *or*	
ENG	120	Technical Composition I	3
			14

Second Semester

FSM	170	Principles of Food Preparation II	4
FSM	175	Nutrition	3
CIS	119	Introduction to Office Software	3
ACC	112	Accounting Procedures I	3
		Math or Science Elective (AOS 122 recommended)	3
			16

Third Semester

FSM	212	Menus/Merchandising/Facilities Planning	3
FSM	213	Quantity Food Purchasing	3
BUS	221	Business Law I	3
EWE	220	Cooperative Work Experience I *or*	
BUS	115	Elements of Supervision or	
BUS	219	Small Business Management or	
FSM	299	Selected Topics in Food Service	3
		Communications Elective (SPE 128, SPE 121, SPE 122, or SPE 123 recommended)	3
			15

Fourth Semester

FSM	271	Food Service Management	3
FSM	273	Food, Beverage, and Labor Control	3
PSY	122	Psychology in Business and Industry	3
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective	3
			15
		Total Hours	60

Food Service Management

(Certificate)
Plan 22FG
Business Division, Room A143, (847) 543-2041

This program prepares students for entry level employment in restaurants, clubs, caterers, bakeries and institutional food service as members of the management team. Professional food service managers are able to profitably plan menus, purchase products and services, and recruit and motivate employees in appropriately designed facilities to market prepared food and beverage services to customers.

FSM	110	Introduction to Professional Food Service	3
FSM	111	Principles of Food Preparation I	4
FSM	113	Applied Food Service Sanitation	1
FSM	170	Principles of Food Preparation II	4
FSM	175	Nutrition	3
FSM	212	Menus/Merchandising/Facilities Planning	3
FSM	213	Quantity Food Purchasing	3
FSM	271	Food Service Management	3
FSM	273	Food, Beverage, Labor Control	3
EWE	220	Cooperative Work Experience I *or* FSM Elective	3-4
		Total Hours	30-31

Culinary Arts

(Certificate)
Plan 22FH
Business Division, Room A143, (847) 543-2041

This program prepares students for employment as cooks and bakers in the food service industry. Graduates of the program are able to profitably plan menus, utilize recipes, choose ingredients, use equipment properly and safely, coordinate production, and maintain records to satisfy discriminating customers. Appropriate experience and expertise in the industry leads to "chef' status."

FSM	110	Introduction to Professional Food Service	3
FSM	111	Principles of Food Preparation I	4
FSM	112	Culinary Arts I	3
FSM	113	Applied Food Service Sanitation	1
FSM	170	Principles of Food Preparation II	4
FSM	171	Culinary Arts II	3
FSM	175	Nutrition	3
FSM	213	Quantity Food Purchasing	3
EWE	220	Cooperative Work Experience I *or* FSM Elective	3-4
		Total Hours	27-28

Professional Cook

(Certificate)
Plan 22FD
Business Division, Room A143, (847) 543-2041

This program prepares students for entry level employment as cooks and bakers in the Food Service Industry. Students are taught to use recipes, equipment and ingredients in a professional kitchen.

FSM 111	Principles of Food Preparation I	4
FSM 112	Culinary Arts I	3
FSM 113	Applied Food Service Sanitation	1
FSM 170	Principles of Food Preparation II	4
FSM 171	Culinary Arts II	3
	Total Hours	15

For more information on this program of study students may contact either the division office listed above or the following faculty member.

Food Service

Name	Office	Phone Number
Cliff Wener	A135	(847) 543-2823

HEALTH INFORMATION TECHNOLOGY

(Associate in Applied Science)
Plan 21HM
Biological & Health Sciences Division
Room C140, (847) 543-2042

The field of health information provides a wide variety of professional opportunities in the health care industry. Health information is a unique profession that combines facets of medicine, data management, and information technology, giving graduates the background to work in a range of health care settings. Courses in medical terminology, anatomy and physiology, and medical science lay the foundation for the program, which focuses on collecting, maintaining, retrieving, and analyzing the health information of patients. Students also learn the legal aspects of health information, statistics, coding and reimbursement methods, health care quality improvement techniques, as well as health records management.

Graduates of the college's Health Information Technology Program include coding professionals, health information department managers, cancer registrars, nursing home consultants, quality improvement specialists, medical billers, transcriptionists, and medical office managers, among others. Work settings include hospitals, HMOs, physicians' offices, clinics, insurance companies, professional associations, nursing homes, and medical billing services.

If you are interested in health care but don't think direct patient care is right for you, health information technology can prepare you for a satisfying and rewarding career in health care and related fields.

Accreditation and Certification
The Health Information Technology Program is accredited by the Commission on the Accreditation of Allied Health Educational Programs (CAAHEP) in cooperation with the American Health Information Management Association's Council on Accreditation. Graduates of the program are eligible to apply to write the accreditation examination of the American Health Information Management Association for the designation RHIT (Registered Health Information Technician).

Admissions to the program
The HIT Program is limited in terms of the number of students who can be admitted any given academic year. Preference will be given to residents of Community College District 52 (including other community districts with which CLC has a Joint Educational Agreement). Please review the admission requirements that are listed below.

1. **Submit the following records to the Admission and Records Office:**
   A. Application for admission to the college.
   B. HIT request for screening.
   C. Official transcript (sent directly to CLC from appropriate institution) of your record from the last high school you attended. If you did not or will not graduate from high school, you must submit a copy of your High School Equivalency (GED) Certificate.
   D. Official transcripts of your records from all previous colleges that show coursework relevant to the HIT selection criteria, sent directly to CLC by the college(s).
2. **Schedule an interview with the HIT Coordinator, Denise Anastasio. To make an appointment, please call (847) 543-2338.**
3. **Minimum Selection Criteria: Your records must show that you satisfy the following:**
   A. High school graduate or the equivalent.
   B. Language and Math proficiency.

Screening deadline: There will be a "rolling" admissions so that student applications will be considered as they are received.

General Education and Support Causes

ENG	121	English Composition I or	
ENG	120	Technical Composition I	3
BIO	121	General Biology I	4
CIS	119	Introduction to Office Software or	
AOS	112	Automated Office Technology or	
CIS	120	Introduction to Computers	3
BIO	124	Anatomy & Physiology	5
		Social and Behavioral Science Electives	6
		Humanities and Fine Arts Elective	3
		Speech Elective (Choose from SPE 111, 121, 122, 123, or 128	3
			27

Health Information Technology Courses:

HIT	111	Medical Terminology	3
HIT	112	Health Care Delivery Systems	2
HIT	113	Ethical/Legal Aspects	2
HIT	115	Health Data Content and Structure	3
HIT	117	Basic CPT Coding	2
HIT	118	Basic ICD9CM Coding	2
HIT	119	Pharmacology	1
HIT	172	Health Statistics and Registries	2
HIT	212	Clinical Practicum I	4
HIT	213	Clinical Practicum II	2
HIT	214	Organization and Supervision	2
HIT	215	Medical Science	3
HIT	217	Health Information Systems and Data Literacy	3
HIT	218	Seminar in Health Information	2
HIT	219	Quality Management and Performance Improvement	2
HIT	271	Advanced Coding	2
HIT	272	Reimbursement Systems in Healthcare	2
			39

Total Hours for A.A.S. Degree 66

The following courses will be offered in the spring of even years (spring of 2002, spring of 2004) ONLY:
HIT 214 and HIT 219

The following courses will be offered in the spring of odd years (spring of 2003, spring of 2005) ONLY:
HIT 172 and HIT 217

Students are recommended to seek the advice of HIT faculty on course scheduling every semester.

Medical Transcription

(Certificate)
Plan 21MH
Biological & Health Sciences Division
Room C140, (847) 543-2042

Medical transcriptionists transcribe medical reports dictated by physicians and other health care professionals. These reports include operation reports, pathology reports, history and physical examinations, and other reports. Transcriptionists must have an extensive knowledge of medical terminology, anatomy, medications, and the vocabulary related to the diagnosis and treatment of disease. Accuracy and speed in word processing is also required. Medical transcriptionists are employed by hospitals, physician offices and transcription services. Experienced transcriptionists may wish to establish their own transcription service business.

Many of the courses may be applied to the Health Information Technology program if the student desires to progress in the future to become a Registered Health Information Technician (RHIT).

A student must achieve a grade of C or better in all HIT courses.

BIO	111	Human Form and Function	3
AOS	113	Comprehensive Word Processing	3
AOS	172	Business English	3
AOS	175	Keyboarding Speed and Accuracy	2
HIT	111	Medical Terminology	3
HIT	112	Health Care Delivery Systems	2
HIT	114	Medical Transcription	2
HIT	115	Health Data Content and Structure	3
HIT	116	Advanced Medical Transcription	3
HIT	119	Pharmacology	1
HIT	174	Clinical Practice in Medical Transcription	1
HIT	215	Medical Science	3

Total Hours 29

Medical Billing Specialist

(Certificate)
Plan 21HN
Biological & Health Sciences Division
Room C140, (847) 543-2042

Medical billers play a critical role in the financial aspects of a physician's practice. They report the patient's diagnosis and the services rendered to that patient using special medical codes. These codes are included on the bills submitted to insurance companies, managed care plans and Medicare. Medical billers need to have extensive knowledge of medical terminology, coding, and insurance procedures. Medical billers are employed by physicians, clinics and billing services. Experienced billers may establish their own billing service companies.

Many of the courses may be applied to the Health Information Technology program if the student desires to progress in the future to become a Registered Health Information Technician (RHIT).

A student must achieve a grade of C or better in all HIT courses.

BIO	111	Human Form and Function	3
HIT	111	Medical Terminology	3
HIT	117	Basic CPT Coding	2
HIT	118	Basic ICD-9-CM Coding	2
		A computer applications course: (CIS 120 *or* BSS 112 *or* DPR 175)	3
HIT	119	Pharmacology	1
HIT	171	Insurance Procedures for the Medical Office	3
			17

Medical Office Specialist

(Certificate)
Plan 21HO
Biological & Health Sciences Division
Room C140, (847) 543-2042

This certificate is designed to prepare students to work in the front office of a physician office or clinic. Medical office specialists need to have the knowledge and skills required of many office workers; in addition, they need specialized knowledge related to the medical setting. Students in the program will learn how to schedule appointments, arrange hospital tests and surgery, protect the confidentiality of patient records, transcribe letters and medical reports, and maintain accurate records.

Many of the courses may be applied to the Health Information Technology program if the student desires to progress in the future to become a Registered Health Information Technician (RHIT).

A student must achieve a grade of C or better in all HIT courses.

AOS	112	Automated Office Systems	3
AOS	175	Keyboarding Speed & Accuracy Building	2
AOS	214	Administrative Office Procedures	3
HIT	111	Medical Terminology	3
HIT	112	Health Care Delivery Systems	2
HIT	113	Ethical/Legal Aspects of Medical Records	2
HIT	114	Medical Transcription	2
HIT	119	Pharmacology	1
HIT	173	Medical Office Procedures	3
		Total Hours	21

For more information on these programs students may contact the division office listed or the following faculty members.

Health Information Technology

Name	Office	Phone Number
Denise Anastasio	C143	(847) 543-2338
Margaret Kyriakos	C143	(847) 543-2879

HORTICULTURE

(Associate in Applied Science)
Plan 21HA, 21HB, 21HC, 21HP
Biological & Health Sciences Division
Room C140, (847) 543-2042

The curriculum is designed to provide a foundation in one of four occupational areas: Floriculture, Landscape Design, Turf and Landscape Maintenance or Natural Areas Management. Course work is intended for persons who are already employed in horticulture as well as those who want to enter the field. Supervised fieldwork is provided for students with sophomore status, and is required of those students with no work experience in horticulture.

General Requirements for all students:

SPE		Speech Communications (Choose from SPE 111, SPE 121, SPE 123 or SPE 128)	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
		Social & Behavior Sciences Elective	6
		Humanities & Fine Arts Elective	3
		Science and/or Math	3
			18

Horticulture Core Courses
(required for all HRT degree seeking students)

HRT	111	Basic Horticulture	3
HRT	112	Tree Identification	3
HRT	113	Shrub Identification	3
HRT	114	Soils, Fertilizers and Water	3
HRT	116	Entomology	3
HRT	119	Plant Pathology	3
HRT	217	Plant Propagation	3
			21

Horticulture Program Options
(Choose one of the following options.)

Floriculture Option (Plan 21HA)

HRT	172	Interior Plant Maintenance	3
HRT	173	Perennial Flowers	3
HRT	174	Basic Floral Design	3
HRT	210	Greenhouse Crop Production	3
		Work Experience (Choose from EWE 220 or HRT 276)	3
		Horticulture or General Electives	6
			21

Landscape Design Option (Plan 21HB)

HRT	118	Landscape Graphics	3
HRT	213	Landscape Design	3
HRT	214	Landscape Construction	3
HRT	215	Computer Landscape Design	3
		Work Experience (Choose from EWE 220 or HRT 276)	3
		Horticulture or General Electives	6
			21

Turf and Landscape Maintenance Option (Plan 21HC)

HRT	110	Landscape Maintenance	3
HRT	173	Perennial Flowers	3
HRT	176	Small Engine Repair and Maintenance	3
HRT	212	Turf Management	3
		Work Experience (Choose from EWE 220, HRT 276)	3
		Horticulture or General Electives	6
			21

Natural Areas Management Option (Plan 21HP)

BIO	120	Environmental Biology	4
GEO	126	Geology of Illinois	2
BIO	126	Local Flora	3
GEO	224	Environmental Geology	3
HRT	216	Natural Areas Management	4
HRT	276	Field Work	3
		Elective	3
			22

Total Hours 60-61

Arboriculture

(Certificate)
Plan 21HL

HRT	110	Landscape Maintenance	3
HRT	111	Basic Horticulture	3
HRT	112	Tree identification	3
HRT	116	Entomology	3
HRT	119	Plant Pathology	3
HRT	170	Arboriculture	3
		Total Hours	18

Landscape Maintenance

(Certificate)
Plan 21HH

HRT	110	Landscape Maintenance	3
HRT	112	Tree Identification	3
HRT	113	Shrub Identification	3
HRT	173	Perennial Flowers	3
HRT	176	Small Engine Repair and Maintenance	3
		Total Hours	15

Floral Design

(Certificate)
Plan 21HI

HRT	111	Basic Horticulture	3
HRT	172	Interior Plant Maintenance	3
HRT	174	Basic Floral Design	3
HRT	175	Advanced Floral Design	3
HRT	210	Greenhouse Crop Production	3
		Total Hours	15

Interior Landscaping

(Certificate)
Plan 21HJ

HRT	111	Basic Horticulture	3
HRT	114	Soils, Fertilizers and Water	3
HRT	116	Entomology	3
HRT	118	Landscape Graphics	3
HRT	119	Plant Pathology	3
HRT	172	Interior Plant Maintenance	3
HRT	174	Basic Floral Design	3
HRT	210	Greenhouse Crop Production	3
		Total Hours	24

Natural Areas Management

(Certificate)
Plan 21HQ

HRT	111	Basic Horticulture	3
HRT	112	Tree Identification	3
HRT	113	Shrub Identification	3
BIO	120	Environmental Biology	4
GEO	126	Geology of Illinois	2
BIO	126	Local Flora	3
HRT	216	Natural Areas Management	4
		Total Hours	22

For more information on these programs, students may contact the division office listed or the following faculty members.

Name	Office	Phone Number
Don Lloyd	1408	(847) 543-2881
Mark Zampardo	1408	(847) 543-2320

HUMAN SERVICES PROGRAM

(Associate in Applied Science)
Plans 25HB, 25HC, 25HD, 25HI
Social Science Division,
Room A244, (847) 543-2047

This program prepares students for entry and middle-level positions in agencies and programs specialized in helping people. This includes organizations such as full-day and half-day preschool programs, programs for the exceptional child, and adult-care programs provided through hospitals, nursing homes, institutions for the developmentally disabled, community human service programs, and treatment programs for alcohol and substance abuse. The degree-seeking student completes general education courses, HUS core courses, plus one of the four options. All students are encouraged to consult with the program coordinator. Human Services courses may transfer to four-year institutions with related programs.

General Education Requirements

ENG	121	English Composition I	3
SPE	111	Communications II *or*	
SPE	121	Fundamentals of Speech *or*	
SPE	128	Interviewing Practices	3
PSY	121	Introduction to Psychology	3
SOC	121	Introduction to Sociology	3
PSY	222	Child Growth and Development	3
		Humanities & Fine Arts Elective	3
		MTH 141 *or* higher *or* Science Elective	3
		Total General Requirements	21

Human Services Core for Adult Services and ASAAD Options

HUS	111	Health and Nutrition	3
HUS	112	Community Social Services	3
HUS	113	Group Processes	3
HUX	170	Introduction to Substance Abuse	3
HUS	223	Adolescent and Adult Development	3
HUS	118	Professional Helping Skills	3
SOC	224	Sociology of the Family	3
		Total	21

Human Services Core for Exceptional Child Services Option

HUS	111	Health and Nutrition	3
HUS	112	Community Social Services	3
HUS	113	Group Processes	3
HUS	118	Professional Helping Skills	3
HUS	223	Adolescent and Adult Development	3
HUX	170	Introduction to Substance Abuse	3
		Total	18

Human Services Program Options
Adult Services Option Plan 25HC **22 hours**
(AAS degree requires 64 hours)

HUS	210	Principles of Residential Care	3
HUS	116	Principles of Foster Care	1
HUS	114	Human Services Supervision	3
*HUS	170	Human Service Practicum I	4
*HUS	171	Human Service Practicum II	4
HUS	213	Mental Retardation	3
HUS	218	Psycho-Social Aspects of Aging	
CRJ	117	Community-Based Corrections	3
CRJ	121	Introduction to Criminal Justice	3
CRJ	124	Penology and Corrections	3
PRS	111	Survey of Psychiatric Rehabilitation	3
PRS	112	Psychiatric Rehabilitation Skills	3
PSC	122	State and Local Politics	3
*PSY	223	Abnormal Psychology or	3
*SOC	223	Deviance	3

HUX courses qualify for electives

*Required courses

Alcohol, Substance Abuse, and Addictive Disorders (ASAAD) Option Plan 25HD **25 hours**
(A.A.S. degree requires 67 hours)

*HUX	171	Assessment and Diagnosis of Alcoholism & Substance Abuse Disorders	2
*HUX	172	Other Addictive Disorders	2
*HUX	173	Special Populations and Addictive Disorders	2
*HUX	174	Ethics, Law Regulations, Records & Documentation	2
*HUX	175	Pharmacological & Other Medical Terminology	1
*HUX	176	Advanced Counseling Skills for Addictive Disorders	3
*HUX	177	Advanced Group Counseling Skills	3
*HUX	178	Assessment & Treatment of Addictive Families	2
*HUS	170	Human Services Practicum I	4
*HUS	171	Human Services Practicum II	4
HUX	179	Psycho-Social Aspects of HIV	2

Students who enter the ASAAD option should either have no history of alcohol, substance abuse or any other addictive disorders or have been recovering without relapse for at least one year. Students who do not meet one of these criteria may not be eligible to participate in required practica or to be certified to work in the field.

*Required Courses

Exceptional Child Services Option Plan 25HB 25 hours
(AAS degree requires 64 hours)

ECE	131	The Special Needs Child in ECE	3
HUS	213	Mental Retardation	3
ECE	216	Creative Activities I	3
*ECE	222	The Exceptional Child	3
*ECE	273	Child, Family, and Community *or*	
SOC	224	Sociology of the Family	3
*HUS	170	Human Services Practicum I	4
*HUS	171	Human Services Practicum II	4
HUS	299	Special Topics in the Human Services	1-3
CRJ	229	Juvenile Delinquency	3
CRJ	121	Introduction to Criminal Justice	3
CRJ	124	Penology and Corrections	3
PSY	221	Educational Psychology	3
*EDU	120	Observation/Guidance of Children	2
EDU	221	Introduction to Teaching	3
ENG	249	Child and Young Adult Media	3
ART	125	Art for Elementary Teachers I	2
EDU	299	Special Topics in Education	1-3

*Required courses

Course substitutions for all majors may be made with the approval of the program coordinator.

Human Services Program

(Certificate)
Plan 25HF

The certificate program is intended only for students who already hold professional degrees or have taken extensive course work in other academic fields. The certificate provides the additional study that is often required when there has been a career change.

Required Courses

ENG	121	English Composition I	3
PSY	121	Introduction to Psychology	3
PSY	222	Child Growth and Development	3
HUS	113	Group Processes	3
HUS	118	Professional Helping Skills	3
HUS	223	Adolescent and Adult Development	3
SOC	224	Sociology of the Family	3
			21

Electives
A minimum of 9 additional semester hours must be selected from one of the options in Human Service Program: Exceptional Child Services; Adult Services. Substitutions may be made with coordinator or division approval. 9

Total Hours 30

Human Services Program

Alcohol, Substance Abuse and Addictive Disorders (ASAAD) Certificate • Plan 25HG

In order to be admitted to this certificate option, students must first meet with the program coordinator and must complete 18 credit hours of the prerequisite coursework. The prerequisite courses for certificate completion are:

HUS	111	Health and Nutrition	3
HUS	113	Group Processes	3
HUS	118	Professional Helping Skills	3
HUS	223	Adolescent and Adult Development	3
PSY	222	Child Growth & Development	3
SOC	224	Sociology of the Family	3

Prerequisite courses will be waived with the permission of the Human Services Program Coordinator, upon submission and review of transcripts indicating their successful completion. Students needing to meet these prerequisites may take them concurrent with the courses required for the certificate.

Alcohol, Substance Abuse and Addictive Disorders

*	HUX 170	Introduction to Substance Abuse	3
*	HUX 171	Assessment and Diagnosis of Alcoholism & Substance Abuse Disorders	2
*	HUX 172	Other Addictive Disorders	2
*	HUX 173	Special Populations and Addictive Disorders	2
*	HUX 174	Ethics, Law Regulations, Records & Documentation	2
*	HUX 175	Pharmacological & Other Medical Terminology	1
*	HUX 176	Advanced Counseling Skills for Addictive Disorders	3
*	HUX 177	Advanced Group Counseling Skills	3
*	HUX 178	Assessment & Treatment of Addictive Families	2
*	HUX 179	Psycho/Social Aspects of HIV Infections and Chemical Health	2
*	HUS 170	Human Services Practicum I	4
*	HUS 171	Human Services Practicum II	4
		Total	30

* Required Courses

** HUS 219 Internship 5
** Students preparing for CADC certification are advised to take this course.

Faculty who teach in this subject area are available during scheduled office hours to advise students about their program and career opportunities.

Name	Office	Phone Number
Carol Huntsinger	D120	(847) 543-2742

INDUSTRIAL MAINTENANCE AND REPAIR

(Certificate & A.A.S.)
Plan 24IC - Certificate
Plan 24ID - A.A.S.
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This program prepares students for employment and advancement in various fields related to industrial maintenance. Maintenance mechanics typically install, maintain, and repair machinery and equipment. A general certificate may be earned by completing the core courses. The associate degree program provides areas of concentration within the industrial maintenance field.

Core Courses: Required for Certificate or A.A.S. Degree

MTT	110	Blueprint Reading	3
MTH	114	Applied Math I or higher level Math	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
MCD	111	Manufacturing Processes	3
CAD	110	CAD/CAM Concepts	3
MTT	111	Machine Shop I	3
IMR	110	Industrial Pneumatics and Hydraulics	3
IMR	111	Machine Components and Repair	3
WLD	170	General Welding	2
RAC	174	Applied Electricity (for RAC concentration) or	4
ELT	170	DC Circuit Fundamentals and	2
ELC	172	Applied AC Circuit Theory	2
		Total Hours	30

Concentrations
In order to obtain an A.A.S. degree an additional 18 credit hours of technical courses must be taken along with the required additional general education courses. Courses are arranged by concentrations to allow the student to focus on a specific area of industrial maintenance.

Machine Maintenance & Repair

IMR	112	Pump Overhaul and Repair	3
MTT	210	Machine Shop II	3
CNC	110	CNC Operations I	3
ELC	114	Motor & Machine Controls	3
		Technical Elective	6

Electrical Maintenance & Repair

ELC	113	Basic Instrumentation and Shop Practice	2
ELC	114	Motor and Machine Controls	3
ELC	211	Electrical Machinery	3
		Technical Elective	10

Welding

WLD	171	Gas Welding, Cutting, and Brazing	3
WLD	172	Shielded Metal Arc Welding	3
WLD	175	Gas Metal Arc Welding	3
		Technical Elective	9

Refrigeration & Air Conditioning Maintenance & Repair

RAC	110	Theory of Refrigeration	5
RAC	113	Commercial Refrigeration Systems	4
RAC	119	Electric Motors and Controls	5
		Technical Elective	4

Plumbing & Pipefitting

IMR	113	Plumbing & Pipefitting I	3
IMR	114	Plumbing & Pipefitting II	3
IMR	112	Pump Overhaul & Repair	3
		Technical Electives	9

Additional General Education Requirements for A.A.S. Degree

SPE	111	Communications II	3
ECO	110	Economics for Business & Industry	3
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective	3
		Total Hours	60

Technical Electives

Technical electives may include courses from the above areas of concentration as well as those listed below. See an advisor for assistance in choosing courses related to your area of concentration and/or career goals. Prerequisites must be met.

EWE	220	Cooperative Work Experience I	1-4
ELC	171	Programmable Logic Controllers	3
ELC	211	Electrical Machinery	3
ELC	215	Power Transmission and Distribution	4
ELT	117	Industrial Digital Electronics I	3
ELT	118	Industrial Digital Electronics II	3
ELT	172	Applied Communications Circuits	3
IMR	115	Carpentry I	3
IMR	116	Carpentry II	3
MTT	210	Machine Shop II	3
MTT	212	Precision Machining	3
CNC	210	CNC Operations II	3
MFG	210	Manufacturing Materials	3
MCD	112	Basic Metallurgy I	3
MCD	113	Basic Metallurgy II	3
MCD	114	Dimensional Metrology	3
PHY	120	Practical Aspects of Physics	4
RAC	117	Refrigeration Installation and Service Problems	4
RAC	118	Residential Heating Systems	4
ROB	111	Introduction to Robotics	3
ROB	112	Automated Systems Controls	3
WLD	174	Advanced Shielded Metal Arc Welding	3
WLD	176	Welding Certification	1-3
WLD	178	Gas Tungsten Arc Welding	3

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Industrial Maintenance/Repair

Name	Office	Phone Number
Jerry Kroll	HST 150f	(847) 543-2572

LIBRARY TECHNICAL ASSISTANT

(Associate in Applied Science)
Plan 23LC
Communication Arts, Humanities & Fine Arts Division
Room B237, (847) 543-2040

Library Technical Assistants work at the paraprofessional or preprofessional level in libraries. They are technical support staff members with specific library related skills. The courses will provide a broad foundation of knowledge which can apply to technical or public service work in academic, school, public, or special libraries. There is a heavy emphasis on skills related to automation of library processes and services.

First Semester

ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
LTA	121	Introduction to Library Science	3
LTA	171	Audio-Visual Media and Equipment	3
CIS	120	Introduction to Computers	3
		Social & Behavioral Sciences Elective	3
			15

Second Semester

LTA	272	Cataloging and Classification	3
COM	111	Introduction to Multimedia	3
SPE	121	Fundamentals of Speech	3
		Social & Behavioral Sciences Elective	3
		Elective (from the list)	3
			15

Third Semester

LTA	172	Reference and Public Services I	3
LTA	273	Library Materials	3
COM	115	Internet Fundamentals	3
		Mathematics or Science Elective	3-4
ART	240	History of Art *or*	
HUM	121	Introduction to Humanities *or*	
HUM	125	Introduction to Fine Arts *or*	
MUS	124	Introduction to Music	3
			15-16

Fourth Semester

LTA	277	Automation for Library Technicians	3
LTA	173	Reference and Public Services II	3
LTA	115	Supervised Field Practicum II	3
		Electives (from A.A.S. degree list)	6
			15

Total Hours 60-61

A.A.S. Degree Electives

LTA	279	Children's Library Services	3
ENG	249	Children and Young Adult Media	3
CIS	112	Introduction to Local Area Networking	3
CIS	236	LAN Administration	3
CIS	119	Introduction to Office Software	3
COM	112	Multimedia Platforms	3
COM	171	Introduction to Computer Graphics	3
COM	215	Multimedia Presentations	3
CIS	290	Desktop Publishing	3
ART	222	Introduction to Computer Art	3

Library Technical Assistant

(Certificate)
Plan 23LH

LTA	121	Introduction to Library Science	3
LTA	171	Audio-Visual Media and Equipment	3
LTA	273	Library Materials	3
LTA	272	Cataloging and Classification	3
LTA	277	Automation for Library Technicians	3
LTA	172	Reference and Public Services I	3
LTA	173	Reference and Public Services II	3
LTA	114	Supervised Field Practicum I	2
COM	115	Internet Fundamentals	3
		Electives (from certificate list below)	6
		Total Hours	32

LTA Certificate Electives are to be chosen from the following courses:

LTA	279	Children's Library Services	3
ENG	249	Children and Young Adult Media	3
COM	111	Introduction to Multimedia	3
CIS	112	Introduction to Local Area Networking	3
CIS	119	Introduction to Office Software	3
CIS	120	Introduction to Computers	3
CIS	236	LAN Administration	3
COM	112	Multimedia Platforms	3
COM	171	Introduction to Computer Graphics	3
COM	215	Multimedia Presentations.	3
CIS	290	Desktop Publishing	3
ART	222	Introduction to Computer Art	3

For more information on this course of study, students may contact either the division office listed or the LTA coordinator.

Name	Phone Number
Barb Brattin	(847) 244-5150, ext. 3026

MACHINE TOOL TRADES

(Certificates & A.A.S.)
Plan 24MJ - Basic Machining Certificate
Plan 24SM - Machine Tool Trades Certificate
Plan 24SR - Tool and Mold Maker Certificate
Plan 24MD - A.A.S.
Engineering, Math., Physical Sciences Division
Room B162, (847) 543-2044

This program prepares students for employment and advancement in the machine tool field. Machinists are skilled workers who are able to read and interpret blueprints, use common hand tools, set up and operate metal cutting machines, and use precision measuring instruments. Advanced placement in this program is possible for experienced machinists. Apprenticeship credit is also available. Machine tool courses are approved by the United States Department of Labor, Bureau of Apprenticeship Training.

Phase I — Basic Machining Certificate

CNC	110	CNC Operations I	3
MTH	114	Applied Math I	3
MTT	110	Machine Trades Blueprint Reading	3
MTT	111	Machine Shop I	3
MTT	210	Machine Shop II	3
		Total Hours	15

Phase II — Machine Tool Trades Certificate

CNC	115	CNC Programming I *or*	
EWE	220	Cooperative Work Experience I	3
MCD	111	Manufacturing Processes	3
MCD	112	Basic Metallurgy I	3
MTH	115	Applied Math II	3
MTT	113	Grinding Technology	3
MTT	212	Precision Machining	3
WLD	170	General Welding	2
		Total Hours	35

Phase III — Tool & Mold Maker Certificate
An advanced certificate in Tool and Mold Making is obtained by completing the courses listed above and the following. These courses may be taken prior to the courses listed above provided requisites have been met. Substitutions may be made with advisor approval.

CNC	210	CNC Operations II *or*	
MTT	215	Diemaking II *or*	
MTT	216	Moldmaking II	3
CNC	217	Introduction to Wire EDM Machining	3
MTT	115	Introduction to Diemaking	3
MTT	116	Introduction to Moldmaking	3
MTH	211	Jig & Fixture Design	3
		Total Hours	50

Phase IV — Machine Tool Trades A.A.S. Degree

Students wishing to obtain an A.A.S. Degree must complete the following course requirements along with those required for the advanced certificate.

General Education Courses*

ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
SPE	111	Communications II	3
ECO	110	Economics for Business & Industry	3
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective	3
			15
		Total Hours	65

*Refer to general education requirements for career programs on page 62.

For more information on this course of study students may contact either the division office listed above or one of the following faculty members.

Machine Tool Trades

Name	Office	Phone Number
Don Ruesch	TEC 150c	(847) 543-2506

MECHANICAL ENGINEERING TECHNOLOGY

(Associate in Applied Science)
Plan 24MB
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

Mechanical engineering technicians are the semi-professional members of the engineer-scientist-technician team engaged in the design of machines, mechanisms, and other mechanical systems. Assignments may include drafting, designing, product and materials testing, and supervision. In addition to a broad based background in mechanical design, this program offers training on an industrial CAD system.

First Semester

EGR	121	Engineering Graphics	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
MCD	111	Manufacturing Processes	3
MTH	117	Technical Math I **	3-4
PHY	121	General Physics I	5
			17-18

Second Semester

CAD	117	Introduction to AutoCAD	3
EGR	115	Applied Mechanics: Statics	3
EGR	122	Descriptive Geometry	3
MTH	118	Technical Math II**	3-4
SPE	121	Fundamentals of Speech *or*	
SPE	111	Communications II	3
			15-16

Third Semester

EGR	215	Mechanics of Materials for Technology	3
ECO	221	Principles of Economics I *or*	
ECO	110	Economics for Business and Industry	3
MCD	214	Mechanical Design & Drafting	3
MCD	213	Statistics and Quality Control *or*	
MTH	211	Technical Math III	3
PSY	122	Psychology in Business and Industry *or*	
PSY	121	Introduction to Psychology	3
		Technical Elective*	3
			18

Fourth Semester

MCD	212	Mechanisms	4
MCD	215	Machine Design	5
ELT	170	DC Circuit Fundamentals *and*	
ELC	172	Applied AC Circuit Theory *or*	
PHY	122	General Physics II	4-5
		Technical Electives*	3
		Humanities & Fine Arts Elective	3
			19-20
		Total Hours	69-72

* **Technical Electives:**
A broad choice of technical electives is available. Students may choose the CAD option (program description follows) or choose electives from certain MCD, ELC, CAD, MTH, MFG, EWE or other technical courses. Students may obtain technical elective approval from the program coordinator.

** For students who may pursue a Bachelors degree in mechanical engineering technology (BSMET) the following mathematics courses may be substituted:
MTH122 - College Algebra
MTH123 - Trigonometry

Please see an advisor in the Mechanical Engineering Technology area before selecting the above courses.

Mechanical Engineering Technology - CAD Option

(Associate in Applied Science)
Plan 24MQ
Engineering, Math., Physical Sciences Division
Room B162, (847) 543-2044

Students desiring the CAD option of the Mechanical Engineering Technology program must take 6 credit hours of CAD coursework in place of the technical electives listed in the Mechanical Engineering Technology program (Plan 24MB). Any two courses, totaling 6 credit hours, may be selected from the following group:

CAD	119	Introduction to Microstation	3
CAD	176	Introduction to PRO Engineer	3
CAD	177	Site Plan Drafting	3
CAD	211	Mechanical Detailing	3
CAD	214	Architectural Applications	3
CAD	217	AutoCAD II	3
CAD	219	Introduction to AutoLISP	3
CAD	273	Advanced CAD Specialization (Variable)	1-3
			6

Note: The student should check course prerequisites before planning any combination of the above courses.

Total hours for A.A.S. degree 70

Mechanical Design Technology

(General Certificate)
Plan 24MI

ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
MTH	117	Technical Mathematics I	3
PHY	121	General Physics I	5
EGR	121	Engineering Graphics	3
EGR	122	Descriptive Geometry	3
CAD	117	Introduction to AutoCAD	3
MCD	111	Manufacturing Processes	3
MCD	212	Mechanisms	4
MCD	214	Mechanical Design & Drafting	3
		Technical Electives	3
		Total Hours	33

For more information on this course of study students may contact either the division office listed or the following faculty member.

Mechanical Engineering Technology

Name	Office	Phone Number
Ross Lyman	A220½	(847) 543-2904

MEDICAL IMAGING

(Associate in Applied Science)
Plan 21MI
Biological & Health Sciences Division
Room C140, (847) 543-2042

The Medical Imaging Program prepares radiographers to work in medical facilities producing radiographic examinations which are interpreted by a radiologist or another medical specialist. Graduates of the program are qualified to take the national certification examination given by the American Registry of Radiologic Technologists. Graduates also meet the additional criteria required for Illinois Certification.

The Medical Imaging program is nationally accredited by the Joint Review Committee on Education in Radiologic Technology. To contact the JRCERT, the address is:

20 North Wacker Drive, Suite 900 • Chicago, IL 60606-2901
(312) 704-5300 • E-Mail jcert@mail.idt.net

Consistent with the Mission and goals of the College of Lake County, the Medical Imaging Program strives for excellence in preparing students for entry-level positions in the Medical Imaging profession. By maintaining high academic and clinical standards, graduates receive an Associate of Applied Science degree in Medical Imaging, become eligible for certification as Registered Radiologic Technologists, and attain clinical competency as entry-level professional radiographers.

The Medical Imaging program sets forth the following goals:

1. Provide graduates with entry-level knowledge and skills to function as competent radiographers.
2. Produce graduates who will provide an optimal level of patient care.
3. Provide the opportunity to explore advanced level imaging modalities.
4. Provide a general education component of approximately 20 hours which are recognized as transfer classes leading to a baccalaureate degree.
5. At least 75% of program graduates will pass the American Registry of Radiologic Technologists certifying examination on first or second attempt.

Interested students may take MIM 110 and MIM 111 prior to being admitted to the program. However, the number of students that can be admitted to any clinical education course is limited for any given session. Therefore, a screening procedure is used to select the academically best qualified from those who request consideration.

Preference is given to residents of Community College District 532 (CLC) and residents of other community college districts with which CLC has joint educational agreements.

To be considered for admission to the Medical Imaging Program, you must:

1. **Submit the following records to the Admission and Records Office:**
   A. Application for admission to the college.
   B. MIM request for screening.
   C. An official transcript (sent directly to CLC from appropriate institution) of your record from the last high school you attended. If you did not or will not graduate from high school, you must submit a copy of your High School Equivalency (GED) test report.
   D. Official transcripts from any previous college(s) showing course work relevant to the MIM selection criteria, sent directly to CLC by the college(s).
2. **Schedule an interview with the MIM Coordinator, Thomas Vogl. To make an appointment, please call 543-2313.**
3. **Minimum selection criteria. Your official transcripts and records must show that you satisfy all of the following criteria:**
   A. High school graduate or the equivalent.
   B. Language and Math Proficiency.
   C. Credit for two years of high school algebra (Remedial or modified algebra will not count.) with a grade of "C" or better,
   OR completion of MTH 108 at CLC with a grade of "C" or better,
   OR an equivalent course from another accredited college with a grade of "C" or better.
   D. Credit for advanced placement high school biology with grades of "C" or better,
   OR completion of BIO 121 at CLC with a grade of "C" or better,
   OR an equivalent course from another accredited college with a grade of "C" or better.
   OR an appropriate score on the CLC Chemistry Placement test.
   E. Credit for one year of high school physics or chemistry with a grade of "C" or better
   OR completion of CHM 120 or CHM 121 or PHY 121 at CLC with a grade of "C" or better,
   OR an equivalent course from another accredited college with a grade of "C" or better.
   F. Eighteen (18) years of age by the first day of the spring semester following the screening deadline.
4. **Meet minimum technical performance standards as defined for the profession. A Statement of Performance Standards is published in the MIM program brochure.**

Screening Deadline: First Wednesday in March. If space is available in the program after the initial screening deadline, qualified students will be accepted in an order based on academic qualifications.

A student must maintain a minimum grade of "C" in each Medical Imaging course to continue in and graduate from the program.

First Fall Semester			
MIM	110	Introduction to Medical Imaging	3
MIM	111	Radiographic Anatomy & Positioning	5
MIM	112	Principles of Radiographic Exposure	3
MIM	170	Orientation to the Clinical Education Center	1
PSY	121	Introduction to Psychology	3
			15
First Spring Semester			
BIO	124	Anatomy and Physiology	5
ENG	121	English Composition I	3
MIM	113	Radiographic Anatomy & Positioning II	5
MIM	114	Clinical Practice I	3
			16
First Summer Session			
MIM	115	Clinical Practice II	3
MIM	116	Advanced Radiographic Procedures I	1
			4
Second Fall Semester			
MIM	210	Technical Aspects of Patient Care	2
MIM	211	Imaging Equipment	6
MIM	212	Clinical Practice III	3
MIM	213	Medical Imaging Pathology	2
SPE		Speech Communications (choose SPE 111, SPE 121, SPE 123 or SPE 128)	3
			16
Second Spring Semester			
MIM	214	Advanced Topics in Radiography	6
MIM	215	Clinical Practice IV	3
MIM	216	Computed Imaging	2
		Social & Behavioral Sciences Elective	3
		Humanities & Fine Arts Elective	3
			17
Second Summer Session			
MIM	271	Clinical Practice V	3
			3
		Total Hours	71

For more information on this program students may contact the division office listed or one of the following faculty members.

Medical Imaging

Name	Office	Phone Number
Lynn Platz	B226	(847) 543-2880
Tom Vogl	B226	(847) 543-2313

MEDICAL LABORATORY TECHNOLOGY

(Associate in Applied Science)
Plan 21MC
Biological & Health Sciences Division
Room C140, (847) 543-2042

The Medical Laboratory Technology Program is designed to prepare technicians for entry level responsibilities and moderately complex laboratory testing procedures in clinical laboratories. Instruction in clinical laboratory theory and procedures in blood bank, hematology, urinalysis, serology, microbiology and clinical chemistry is provided.

This program is accredited by the National Accrediting Agency of Clinical Laboratory Sciences.

Graduates of this program are eligible for registry by nationally recognized certifying agencies.

A student must maintain at least a grade of "C" in each Medical Laboratory course to continue in and graduate from the program.

Students interested in Medical Lab Technology may take MLT 110 prior to being admitted to the program. However, the next course in the sequence (MLT 111) is limited to students who have been admitted to the MLT program. A screening procedure is used to select the academically best qualified from those who request admission to the program.

Preference will be given to residents of Community College District 532 (including other community college districts with which CLC has a Joint Educational Agreement.)
To be considered for admission to the Medical Laboratory Program, you must:

1. **Submit the following records to the Admission and Records Office:**
   A. Application for admission to the college.
   B. MLT request for screening.
   C. Official transcript (sent directly to CLC from appropriate institution) of your record from the last high school you attended. If you did not or will not graduate from high school, you must submit a copy of your High School Equivalency (GED) test report.
   D. Official transcripts from any previous college(s) showing course work relevant to the MLT selection criteria, sent directly to CLC by the college(s).
2. **Schedule an interview with the MLT Coordinator, Trudy Darden. To make an appointment, please call 543-2312.**
3. **Minimum Selection Criteria: Your records must show that you satisfy the following:**
   A. High School graduate or the equivalent.
   B. Language and Math proficiency.
   C. Credit for two years of high school algebra (remedial or modified algebra will not count) with a grade of "C" or better,
   OR Completion of MTH 108 at CLC with a grade of "C" or better,
   OR an equivalent course from another approved college with a grade of "C" or better.
   D. Credit for two years of high school science preferably one year of biology and one year of chemistry with grades of "C" or better,
   OR completion of BIO 121 or CHM 121 at CLC with a grade of "C" or better,
   OR an equivalent course from another approved college with a grade of "C" or better.

Screening Deadline: First Wednesday in March. If space is available in the program after the initial screening deadline, qualified students will be accepted in an order based on academic qualifications.

Summer Session

BIO	121	General Biology I	4
			4

First Semester

BIO	124	Anatomy & Physiology	5
CHM	121	General Chemistry I	5
MLT	110	Introduction to Medical Laboratory Technology	2
MLT	111	Immunology	2
MLT	114	Body Fluid Analysis	2
			16

Second Semester

CHM	123	General Chemistry II	5
ENG	121	English Composition *or*	
ENG	120	Technical Composition	3
MLT	112	Hematology and Coagulation	6
MLT	113	Immunohematology	4
			18

Summer Session

BIO	125	Microbiology	4
			4

Third Semester

MLT	210	Clinical Chemistry	5
MLT	213	Clinical Microbiology	5
		Social and Behavioral Sciences Elective (PSY121 Recommended)	3
		Humanities and Fine Arts Elective	3
			16

Fourth Semester

MLT	271	Chemistry Practicum	2
MLT	272	Hematology Practicum	2
MLT	273	Immunohematology Practicum	2
MLT	274	Microbiology Practicum	2
MLT	275	Serology/Body Fluids/Phlebotomy Practicum	2
		Social & Behavioral Sciences Elective	3
SPE		Speech Communications (choose SPE 111, SPE 121, SPE 123 or SPE 128)	3
			16
		Total Hours	74

Phlebotomy Technician

(Certificate)
Plan 21MP

This certificate prepares students for entry level employment as phlebotomists in hospitals, clinics, or blood banks. Students will develop skills in performing phlebotomy procedures in various health care settings. The clinical practicum lasts eight hours per day, five days per week for three weeks totaling 120 hours.

This program is accredited by the National Accrediting Agency of Laboratory Sciences.

Graduates of this program are eligible for registry by nationally recognized certifying agencies.

A student must maintain at least a grade of "C" in each course to continue the program and obtain a phlebotomy certificate.

Certificate Requirements:

To receive the Phlebotomy Certificate, a student must be at least 18 years old, a high school graduate or the equivalent, and receive a minimum grade of "C" in the following MLT courses and maintain a CLC GPA of 2.0 or higher.

MLT	110	Introduction to Medical Laboratory Technology	2
MLT	115	Phlebotomy Techniques	2
MLT	116	Phlebotomy Clinical	2
		Total Hours	6

For more information on these programs students may contact the division office listed or one of the following faculty members.

Name	Office	Phone Number
Trudy Darden	B248	(847) 543-2312
Reme Tesch	B248	(847) 543-2878

MULTIMEDIA COMMUNICATIONS

(Associate in Applied Science)
Plan 23TB
Communication Arts , Humanities & Fine Arts Division, Room B237, (847) 543-2040

Multimedia Communications provides you with the technical communication skills you'll need to design and produce a variety of commercial, educational and technically related presentations using electronic multimedia platforms as your primary publishing medium. These skills, learned through hands-on classroom experience, will require a demonstrable competency in technical writing, standard PC hardware/ software operations, telecommunications, graphic design, and multimedia presentation authoring. Building on traditional concepts grounded in technical writing, graphic design, and public speaking, Multimedia Communications seeks to extend conventional communication formats to the realm of electronic multimedia. Here you'll learn to create communications that incorporate the elements of sound, animation, hyperlinked programs, text and video. You'll also learn how to develop messages that will ultimately appear on computer screens, information kiosks, CD-ROMS, in online formats, or theater-like seminar environments. Using the Internet as a primary source, you'll also master the online research and communication skills you'll need to develop media projects, find materials, and keep up with industry developments.

First Semester

Written Communications (3 hours)
ENG 120 Technical Composition I 3

Graphics (3 hours)
ART 111 Printing Production 3

Mathematic Elective (3-4 hours)
MTH 114 Applied Mathematics I or higher (MTH 117, 121 or 122 recommended) 3-4

Multimedia Communications (3 hours)
COM 111 Introduction to Multimedia 3

Social Sciences (3 hours)
PSY 121 Introduction to Psychology *or*
PSY 122 Psychology in Business & Industry 3

15-16

Second Semester

Written Communications (3 hours)
ENG 121 English Composition I 3

Speech Communications (3 hours)
SPE 121 Fundamentals of Speech *or*
SPE 122 Business and Professional Speaking *or*
SPE 128 Interviewing Practices 3

Mathematics Elective (3-4 hours)
MTH 115 or higher
MTH 118 Technical Mathematics II *or*
MTH 123 Trigonometry *or*
MTH 222 Elementary Statistics 3-4

Humanities and Fine Arts (3 hours)
PHI 122 Logic *or*
HUM 127 Critical Thinking *or*
Humanities and Fine Arts Elective 3

Multimedia Communications (3 hours)
COM 112 Multimedia Platforms *or*
COM elective 3

15-16

Third Semester

ENG 126 Advanced Composition: Scientific Technical Communications..... 3

Social & Behavioral Sciences Elective 3

Data Processing (3 hours)
CIS 290 Desktop Publishing *or*
CIS elective *or*
COM elective 3

Multimedia Communications (6 hours)
COM 115 Internet Fundamentals 3
COM 116 Developing Web Pages 3

15

Fourth Semester

Written Communication (6 hours)
ENG 113 Technical Communications Practicum *or* 3
EWE 220 Cooperative Work Experience *and*
ENG 266 Professional Communication 3

Graphics Elective (6 hours)
ART 122 Basic Color and Design *or*
ART 124 Basic Drawing *or*
ART 129 Introduction to Photography *or*
ART 222 Introduction to Computer Art *or*
EGR 121 Engineering Graphics..... 6

Multimedia Communications (3 hours)
COM Elective (200 level) 3

15

Note: At this point the required total of 60 hours can be made up by advisor-approved writing, graphics or technical specialty electives.

Total Hours 60

Multimedia Communications

(Certificate)
Plan 23TH

Written Communications (12 hours)
ENG 120 Technical Composition I 3
ENG 126 Advanced Composition: Scientific and Technical Communication 3
ENG 266 Professional Communication 3
ENG 113 Technical Communication Practicum 3

12

Speech Communication (3 hours)
SPE 121 Fundamentals of Speech *or*
SPE 122 Business and Professional Speaking 3

3

Graphics (9 hours)
ART 111 Printing Production *and* 3
ART 222 Introduction to Computer Art *or*
Graphics Elective *or*
COM Elective 3

9

Multimedia Communications (9 hours)
COM 111 Introduction to Multimedia *and* 3
COM 112 Multimedia Platforms *and* 3
COM 116 Developing Web Pages *or*
COM 215 Multimedia Presentations *or*
COM 216 Advanced Online Publishing *or*
COM 217 Multimedia Authoring *or*
COM Elective (200 level) 3

Total Hours 33

Specialty Certificates
Each of the three "specialty" certificates allows an individual to attain proficiency in a specific job skill. The certificates are designed for those needing the skills for their current job, those with a degree desiring additional skills, or for those in another degree program who wish to also have Multimedia and Internet skills.

Multimedia Presentations

(Certificate)
Plan 23TE

COM	111	Introduction to Multimedia	3
COM	112	Multimedia Platforms	3
COM	215	Multimedia Presentations	3
COM	217	Multimedia Authoring	3
		Total Hours	12

Internet Communications

(Certificate)
Plan 23TD

COM	115	Internet Fundamentals	3
COM	116	Developing Web Pages	3
		Total Hours	6

Web Development

(Certificate)
Plan 23TC

COM	111	Introduction to Multimedia	3
COM	112	Multimedia Platforms	3
COM	115	Internet Fundamentals	3
COM	116	Developing Web Pages	3
COM	171	Introduction to Computer Graphics	3
COM	216	Advanced Online Publishing ***or***	
COM	217	Multimedia Authoring ***or***	
		COM or CIS Elective	3
		Total Hours	18

For more information on these programs, students may contact the division office listed or one of the following faculty members.

Name	Office	Phone Number
Ellie Pinkham	B251	(847) 543-2448
Jerry Pinkham	B251	(847) 543-2553
Judy Rosenberg	B252	(847) 543-2546

NURSING

(Associate in Applied Science)
Plan 21NA
Nursing Education
Room D208, (847) 543-2043

The Associate Degree Program in Nursing prepares men and women to function as beginning practitioners in giving direct patient care. The program of studies provides a means of correlating the principles of nursing theory and practice with those of general education. Clinical experience is provided at local hospitals and health care agencies.

The program is accredited by the National League for Nursing Accrediting Commission (61 Broadway, New York, NY 10006, (212) 363-5555, ext 153) and approved by the State of Illinois Department of Professional Regulation (320 West Washington Street, Springfield, IL 62786, www.dpr.state.il.us). After the completion of the program, the graduate is eligible to write the National Council Licensure Examination and, if completed successfully, he or she may apply to the State of Illinois for licensure as a registered nurse.

Registered nurses must be licensed by the Illinois Department of Professional Regulation. To become licensed, applicants must graduate from an approved professional nursing education program, pass an examination, pay the required fees and satisfy requirements of a UCIA criminal history record check. Licenses must be renewed every two years.

The number of students that can be admitted to the first course in the sequence (Nursing 171) is limited for both the fall and spring semester. Therefore, a screening procedure is used to select the academically best qualified from those who request consideration.

Proficiency examinations are available in NUR 171, 172, and 271 for qualified candidates **who have been admitted to the program.**

Preference will be given to residents of Community College District 532 (including other community college districts with which CLC has a Joint Educational Agreement).

To be considered for admission to the Registered Nursing Program, you must:

1. **Submit the following records to the Admission and Records Office:**
   A. Application for admission to the college.
   B. Current ADN request for screening.
   C. Official transcript (sent directly to CLC from appropriate institution) of your record from the last high school you attended. If you did not or will not graduate from high school, you must submit a copy of your High School Equivalency (GED) test report.
   D. Official transcripts from any previous college(s) showing course work relevant to the ADN selection criteria, sent directly to CLC from the college(s).

2. **Attend one General Meeting:** Meetings are scheduled for the first Tuesday of each month from 1:30-3:30 p.m. or 4:30-6:30 p.m. Please call the Office of the Director of Nursing in advance at (847) 543-2043 to confirm specific date and place.
3. **Minimum Selection Criteria:** Your official transcripts and records must show that you satisfy all of the following criteria:
   A. High School graduate or the equivalent.
   B. Language and Math proficiency.
   C. A grade of "C" or better for two semesters (1 year) of high school algebra (Remedial or modified algebra will not count.),
   OR a grade of "C" or better in MTH 102 at CLC or an equivalent course from another accredited college with a grade of "C" or better.
   D. A grade of "C" or better for two semesters (1 year) of high school chemistry,
   OR a grade of "C" or better in CHM 120 or CHM 121 at CLC or an approved equivalent course from another accredited college with a grade of "C" or better.
   E. A grade of "C" or better for four semesters (2 years) of high school biology,
   OR a grade of "C" or better in BIO 121 at CLC or an equivalent course from another accredited college with a grade of "C" or better.

Screening Deadlines: First Wednesday in March and first Wednesday in September. If space is available in the program after screening deadline, qualified students will be accepted in an order based on academic qualifications.

A student must maintain at least a grade of "C" in each nursing course to continue in and graduate from the program.

First Semester			
NUR	171	Nursing: Universal Self-Care	7
B10	124	Anatomy and Physiology	5
PSY	121	Introduction to Psychology	3
			15
Second Semester			
NUR	172	Nursing: Developmental Self-Care	7
ENG	121	English Composition I	3
BIO	125	Introduction to Microbiology	4
SPE	127	Intercultural Communication	3
			17
Third Semester			
NUR	271	Nursing: Health Deviation Self-Care I	9
SPE	121	Fundamentals of Speech *or*	
SPE	123	Group Discussion *or*	
SPE	128	Interviewing Practices	3
SOC	121	Introduction to Sociology	3
			15
Fourth Semester			
NUR	272	Nursing: Health Deviation Self-Care II	9
		Humanities & Fine Arts Elective	3
		Elective[1]	3
			15
		Total Hours	62

[1] Elective must be approved by the Director of Nursing Education.

For more information on this program, students may contact the director of Nursing Education, Dee Swan in Room D208A, (847) 543-2339, the Nursing Education office, D208, or the following faculty members:

Name	Office	Phone Number
Lucille Coleman	D217	(847) 543-2012
Joanne Dude	D211	(847) 543-2336
Tana Durnbaugh	D213	(847) 543-2874
Vicki Francis	D220	(847) 543-2331
Nikki Hagen	D220	(847) 543-2871
Sherry Hernandez	D218	(847) 543-2873
Christine Hunt	D218	(847) 543-2332
Barbara McNeill	D213	(847) 543-2333
Carmella Mikol	D215	(847) 543-2329
Darlene Shackelford	D219	(847) 543-2335
Peggy Welch	D217	(847) 543-2398
Sue Wynn	D219	(847) 543-2870

Certified Nurse Assisting

(Certificate)
Plan 21NB
Nursing Education
Room D208, (847) 543-2043

This program prepares students for employment as nurse assistants who help those who provide patient care. Depending on the setting, nurse assistants may perform some or all of the following: provide direct patient care; transfer and transport patients, equipment, supplies, and specimens; and make observations regarding patients. Duties might include giving baths and back rubs; making beds; serving meals; helping patients in and out of bed; taking temperature, pulse, respiration, weight and blood pressure measurements; answering patients' call lights; taking appropriate action in emergencies; and performing other procedures as directed by the nurse. While the majority of nurse assistants work in long-term care facilities, many are employed in hospitals and other care settings.

This program is approved by the Illinois Department of Public Health.

The State of Illinois Health Care Worker Background Check Act of 1995 requires the college to initiate a UCIA criminal history record check on all individuals registering for the program. The UCIA Criminal Background Check is required for the individual to work as a nursing assistant in Illinois. The Student Handbook contains a description of convictions which would disqualify a person from finding employment as a nursing assistant in the State of Illinois. Please consult the Nursing Education office (543-2043) for further clarification and information regarding this law.

Upon successful completion of this program, the student would be eligible to take the state mandated written competency examination for Nurse Assistant Certification.

Certificate Requirements:

To receive the Certified Nurse Assisting Certificate, a student must receive a minimum grade of "C" in the following NUR course and maintain a CLC GPA of 2.0 or higher.

NUR	110	Nurse Assisting	7
		Total Hours	7

For more information on this program, students may contact the Nursing Education office or the following faculty members:

Name	Office	Phone Number
Joanne Dude	D211	(847) 543-2336
Tana Durnbaugh	D213	(847) 543-2874
Imelda Forsberg	D211	(847) 543-2337
Vicki Francis	D220	(847) 543-2331
Sherry Hernandez	D218	(847) 543-2873
Christine Hunt	D218	(847) 543-2332

REFRIGERATION & AIR CONDITIONING

(Associate in Applied Science)
Plan 24RB
Engineering, Math, Physical Sciences Division
Room B162, (847) 543-2044

This program provides instruction in air conditioning, heating, and refrigeration. Introductory courses in electricity, electric motors, and theory of refrigeration are included. Advanced work in the commercial area includes work on reach-in and walk-in units found in stores, dairies, and markets. Other areas of study include uses of air conditioning, temperature and humidity control, air circulation, cleaning, installation, and troubleshooting of equipment. Students are required to provide their own basic tools, and will be given a national exit exam which will give passing students national recognition on an A.R.I. (Air Conditioning and Refrigeration Institute) National Registry, which goes to Refrigeration, Heating and Air Conditioning employers.

First Semester

RAC	110	Theory of Refrigeration	4
RAC	174	Applied Electricity	4
MTH	115	Applied Mathematics II or higher level math	3
ENG	120	Technical Composition I *or*	
ENG	121	English Composition I	3
RAC	176	Certification Preparation	2
			16

Second Semester

RAC	113	Commercial Refrigeration Systems	4
RAC	119	Electric Motors & Controls	4
		Social & Behavioral Sciences Elective	3
RAC	112	Residential AC Systems	4
			15

Third Semester

RAC	118	Residential Heating Systems	4
RAC	114	Commercial AC Systems	4
		Technical Elective[1]	2-4
PHY	120	Practical Aspects of Physics	4
			14-16

Fourth Semester

RAC	173	Air Movement & Ventilation	4
SPE	111	Communications II	3
RAC	117	Installation & Service Problem	4
		Humanities & Fine Arts Elective	3
ECO	110	Economics for Business & Industry	3
			17

Total Hours 62-64

Refrigeration and Air Conditioning

The two certificates allow students to specialize in Heating and Air Conditioning or Refrigeration and Air Conditioning. Both certificates require introductory courses in electricity, motors and controls, and theory of refrigeration system operation. Students are required to provide their own basic tools, and will be given a national exit exam which will give passing students national recognition on an A.R.I. (Air Conditioning and Refrigeration Institute) National Registry, which goes to Refrigeration, Heating and Air Conditioning employers.

Heating & Air Conditioning

(Certificate)
Plan 24RI

RAC	110	Theory of Refrigeration	4
RAC	174	Applied Electricity	4
RAC	118	Residential Heating Systems	4
RAC	119	Electric Motors & Controls	4
RAC	173	Air Movement & Ventilation	4
RAC	115	Installation and Service Practices for Heating & Air Conditioning	4
RAC	112	Residential AC Systems	4
RAC	176	Certification Preparation	2
		Technical Electives[1]	4
		Total Hours	34

Refrigeration & Air Conditioning

(Certificate)
Plan 24RH

RAC	110	Theory, of Refrigeration	4
RAC	174	Applied Electricity	4
RAC	113	Commercial Refrigeration Systems	4
RAC	119	Electric Motors & Controls	4
RAC	117	Installation & Service Problems	4
RAC	176	Certification Preparation	2
		Technical Electives[1]	12
		Total Hours	34

Commercial Refrigeration Technician

(Certificate)
Plan 24RK

RAC	110	Theory of Refrigeration	4
RAC	113	Commercial Refrigeration	4
RAC	174	Applied Electricity	4
		Total Hours	12

Electrical Troubleshooting Technician

(Certificate)
Plan 24RL

RAC	110	Theory of Refrigeration	4
RAC	119	Motors and Controls	4
RAC	174	Applied Electricity	4
		Total Hours	12

Residential Air Conditioning Specialist

(Certificate)
Plan 24RN

RAC	110	Theory of Refrigeration	4
RAC	112	Residential Air Conditioning	4
RAC	174	Applied Electricity	4
RAC	176	Certification Preparation	2
		Total Hours	14

Residential Air Conditioning Technician

(Certificate)
Plan 24RM

RAC	110	Theory of Refrigeration	4
RAC	112	Residential Air Conditioning	4
RAC	174	Applied Electricity	4
		Total Hours	12

Residential Heating Technician

(Certificate)
Plan 24RJ

RAC	110	Theory of Refrigeration	4
RAC	118	Residential Heataing	4
RAC	174	Applied Electricity	4
		Total Hours	12

[1]Technical Electives must have previous RAC advisor approval. Typically technical electives are to be chosen from the following: RAC prefix courses including RAC 111, 171, 172, and 175, EWE 220 Cooperative Work Experience I, and ELC 171 Programmable Logic Controllers.

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Refrigeration & Air Conditioning

Name	Office	Phone Number
Al Levandowski	TEC 165A	(847) 543-2549
Gary Perdew	TEC 165A	(847) 543-2511

TECHNICAL COMMUNICATION

(Associate in Applied Science)
Plan 23TA
Communication Arts, Humanities & Fine Arts Division
Room B237, (847) 543-2040

Technical communicators are employed in a wide variety of occupational areas to produce the written documentation required at each step of the manufacturing process. They provide the communication links between divergent technical specialties as well as between different levels of technical expertise. This program offers training in both communication skills and technical skills. These skills may be gained two ways: by specializing in communications and electing a technical area or areas, or by specializing in a technical area and electing communications courses.

	Hours Required
Written Communications	15
Speech Communication	3
Social Science	6
Mathematics	6
Humanities and Fine Arts	3
Word Processing	4
Graphics	6
Technical specialization in no more than two technical areas	15
General electives (as approved by advisor)	2

Phase One: *(complete these courses before advancing to next phase)*

Written Communication (3 hours)
*ENG 120 Technical Composition I 3

Mathematics Elective (3-4 hours)
(MTH 117, 141 or 122 recommended) 3-4

Graphics (2-4 hours)
ART 129 Introduction to Photography I or
ART 222 Introduction to Computer Art ***or***
DFT 111 Drafting I, ***or***
ELT 111 Electronic Drafting, ***or***
EGR 121 Engineering Graphics 2-5

Social Sciences (3 hours)
PSY 122 Psychology in Business and Industry 3

Technical Specialty (3-6 hours) 3-6

15-21

Phase Two: *(begin after finishing all courses in Phase One)*

Written Communication (3 hours)
ENG 121 English Composition I 3

Speech Communication (3 hours)
SPE 121 Fundamentals of Speech, ***or***
SPE 128 Interviewing Practices 3

Mathematics Elective (3-4 hours)
(MTH 118, MTH 123 or MTH 222 recommended) 3-4

Humanities and Fine Arts (3 hours)
PHI 122 Logic ***or***
HUM 127 Critical Thinking ***or***
Humanities & Fine Arts Elective 3

Technical Specialty (3-7 hours) 3-7

15-20

Phase Three: *(begin after finishing all courses in Phase Two)*

Written Communication (3 hours)
*ENG 126 Advanced Composition:
Scientific Technical Communications 3

Social & Behavioral Sciences Elective 3

Graphics (3 hours)
*ART 111 Printing Production 3

Word Processing (4 hours)
AOS Elective 1-4
CIS Elective or COM Elective 1-4

Technical Specialty (3-6 hours) 3-6

16-19

*Required core course

Phase Four: *(begin after finishing all courses in Phase Three)*

Written Communication (6 hours)
*ENG 113 Technical Communication
Practicum ***or*** 3
*EWE 220 Cooperative Work Experience I **and**
ENG 266 Professional Communication 3-4

NOTE: At this point the required total of 60 hours can be made up by taking additional approved mathematics, graphics or technical specialty electives.

Total Hours 60

Choosing a Technical Specialty
Students who pursue a degree in Technical Communication may choose to specialize in a technical field such as engineering, data processing, electronics or software development. A technical specialty for students interested in careers in advertising, sales management, sales promotion, publicity or public relations is called marketing communications. Students wishing to specialize in marketing communications should select 15-20 hours from these courses:

BUS	122	Principles of Marketing
BUS	213	Principles of Salesmanship
BUS	214	Advertising
*BUS	217	Marketing Communications
BUS	212	Industrial Marketing

*Required

Choosing a dual degree
A student may elect to receive two Associate Degrees, one in Technical Communication and one in a technical field (such as electronics, engineering, etc.). This option is possible because many of the same general education courses are required in both programs, and because 15-20 credit hours of technically specialized courses count towards the A.A.S. in Technical Communication. Thus, a student may achieve this degree in connection with another degree program by adding the necessary written communications and graphics courses.

Technical Communication

(Certificate) • Plan 23TG

Written Communications (15 hours)			
*ENG	120	Technical Composition I	3
*ENG	126	Advanced Composition: Scientific and Technical Communication	3
*ENG	113	Technical Communication Practicum	3
ENG	266	Professional Communication	3
ENG	121	English Composition I	3
Speech Communication (3 hours)			
SPE	128	Interviewing Practices	3
Graphics (8 hours)			
*ART	111	Printing Production	3
CIS	290	Desktop Publishing	3
ART	222	Introduction to Computer Art	3
Elective (3 hours)			
		Technical Specialty	3
		Total Hours	29

*Required core course

Professional Technical Communication

(Certificate)
Plan 23TI

Available to students who have already completed a degree in another field, and wish to retrain and reenter the job force.

ENG	120	Technical Composition I	3
ENG	126	Advanced Composition:Scientific and Technical Writing	3
ENG	266	Professional Communication	3
ENG	113	Technical Communication Practicum	3
ART	111	Printing Production	3
COM	116	Developing Web Pages	3
		Total Hours	18

For more information on this program, students may contact the division office listed, or the following faculty member:

Name	Office	Phone Number
Judy Rosenberg	B252	(847) 543-2546

WATER-WASTEWATER

(Certificates)
Plan 24WG & 24WH
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This program prepares the graduate for employment as a water supply or waste-water treatment technician. Educational experiences prepare the graduate for the required State of Illinois license.

Water Supply Technician

MTH	114	Applied Mathematics I or higher level math	3
MTH	115	Applied Mathematics II or higher level math	3
CHM	120	Chemical Concepts	4
WWW	111	Maintenance of Mechanical and Electrical Equipment	3
WWW	113	Basic Waterworks Operations	3
WWW	114	Introduction to Water and Wastewater Analysis	3
WWW	117	Intermediate Water and Wastewater Analysis	3
WWW	119	Intermediate and Advanced Waterworks Operations	3
		Technical Electives*	4
		Total Hours	29

Wastewater Treatment Technician

MTH 114	Applied Mathematics I	3
MTH 115	Applied Mathematics II	3
CHM 120	Chemical Concepts	4
WWW 111	Maintenance of Mechanical and Electrical Equipment	3
WWW 112	Fundamentals of Wastewater Treatment	3
WWW 114	Introduction to Water and Wastewater Analysis	3
WWW 116	Intermediate Wastewater Plant Operations	3
WWW 117	Intermediate Water and Wastewater Analysis	3
	Technical Electives*	4
	Total Hours	29

See Civil Technology/Environmental Option for 2 year Associate Degree on page 100.

***Technical Electives:**

- CHM 120, 121, 123, 125, 221, 222
- BIO 120, 121, 122, 125, 211
- BCT 111, 112, 113, 114, 117, 118, 119, 211, 212, 213, 214, 215
- CIV 111, 112, 113, 211, 212, 213, 214, 215
- EWE 220, 270
- IMR 110
- PED 228
- RAC 119, 174, 175
- WWW 299

For more information on this course of study students may contact either the division office listed or the following faculty member.

Name	Office	Phone Number
Rob Twardock	A220a	(847) 543-2903

WELDING

(Certificate)
Plan 24WL
Engineering, Math, Physical Science Division
Room B162, (847) 543-2044

This certificate program and the specialty certificates prepares the student for employment and advancement in welding and welding related occupations. Advanced standing in the program can be arranged for experienced welders.

Phase One

WLD 170	General Welding	2
WLD 171	Gas Welding, Cutting and Brazing	3
WLD 172	Shielded Metal Arc Welding	3
WLD 113	Welding Blueprint Reading	3
MCD 112	Basic Metallurgy	3
MTH 114	Applied Mathematics I	3
		17

Phase Two

WLD 174	Advanced Shielded Metal Arc Welding	3
WLD 175	Gas Metal Arc Welding	3
WLD 176	Welding Certification	1-3
WLD 117	Applied Fabricating & Processing	3
WLD 178	Gas Tungsten Arc Welding	3
MCD 111	Manufacturing Processes *or*	
MCD 113	Basic Metallurgy II	3
Technical Elective*		2-3
		18-21
	Total Hours	35-38

*Electives may be chosen from the following with advisor approval.

DFT 111 - Drafting I
CAD 110 - CAD/CAM Concepts
EGR 121 - Engineering Graphics
ELC 172 - Applied AC Circuit Theory
ELT 170 - DC Circuit Fundamentals
EWE 220 - Cooperative Work Experience I
IMR 111 - Machine Components and Repair
IMR 113 - Plumbing and Pipefitting I
MTT 111 - Machine Shop I
ROB 111 - Introduction to Robotics

Welding Specialty Certificates

Each of the three "specialty" certificates allows an individual to attain proficiency to meet more specific job requirements or career objectives in welding and welding related occupations.

Gas Tungsten Arc Welding (Specialty Certificate)
Plan 24WM

WLD 170	General Welding	2
WLD 113	Welding Blueprint Reading	3
MTH 114	Applied Mathematics I	3
WLD 171	Gas Welding, Cutting and Brazing	3
WLD 176	Welding Certification	1-3
WLD 117	Applied Fabricating & Processing	3
WLD 178	Gas Tungsten Arc Welding	3
	Total Hours	18-20

Gas Metal Arc Welding (Specialty Certificate)
Plan 24WN

WLD 170	General Welding	2
WLD 113	Welding Blueprint Reading	3
MTH 114	Applied Mathematics I	3
WLD 175	Gas Metal Arc Welding	3
WLD 176	Welding Certification	1-3
WLD 117	Applied Fabricating & Processing	3
	Total Hours	15-17

Shielded Metal Arc Welding (Specialty Certificate)
Plan 24WO

WLD	170	General Welding	2
WLD	113	Welding Blueprint Reading	3
MTH	114	Applied Mathematics I	3
WLD	172	Shielded Metal Arc Welding	3
WLD	174	Advanced Shielded Metal Arc Welding	3
WLD	176	Welding Certification	1-3
WLD	117	Applied Fabricating & Processing	3
		Total Hours	18-20

For more information on this course of study students may contact either the division office listed or one of the following faculty members.

Welding

Name	Office	Phone Number
Jerry Kroll	HST 150F	(847) 543-2512

Course Information & Descriptions

Schedule of Classes

This catalog lists courses the College of Lake County intends to offer. Inclusion of a course description does not obligate the College to offer the course in any particular semester. Students are referred to the appropriate class schedule each semester for specific and current information. A class schedule, containing a list of classes to be offered and general registration information, is published prior to each registration and may be obtained from the Admission Office.

Course Numbering

Courses are listed in numerical order by course number within each subject area. All courses, unless otherwise indicated, can be completed within the semester. A course designed to follow another in the same subject area should be taken in sequence according to its number.

First Digit Indicates Year
Courses numbered 000 to 099 indicate adult education, continuing education, or basic skills courses. Courses numbered 100-199 are normally freshman courses, and 200-299 are usually sophomore courses. Courses numbered 500-899 are adult education or continuing education courses.

Second Digit Indicates Program
Courses numbered 100-209 with a middle digit of 0 are basic skills courses designed to prepare students for enrollment in courses at the career or transfer level. These courses do not apply toward a college degree or career certificate and are not used to compute grade point average.

Courses numbered 110-299 with a middle digit 1, 3, 5, 7, or 9 are career courses. In some career programs, middle digits of 2, 4, 6, or 8 are also used for career courses. Policies concerning the transferability of some of these courses to senior colleges and universities vary. Students are urged to consult the Articulation Handbook available in division offices and the Counseling Center and/or to contact the senior institution directly. These courses that do not articulate for the purpose of transfer appear on page 46 of this catalog.

Courses number 100-299 with a middle digit 2, 4, or 6 are transfer courses. These courses have been articulated according to the standards of the Illinois Community College Board. To ensure a specific course is transferable to a specific senior college or university, students again are urged to consult the Articulation Handbook available in division offices and the Counseling Center and/or to contact the senior institution directly.

Third Digit Indicates Sequence
The third digit in any course number serves to distinguish the course from other courses within the same subject area and in the same year.

Prerequisites and Corequisites

To help ensure success in their courses, students must carefully observe requirements that may be placed on enrollment. The College of Lake County uses three types of requirements on enrollment in courses.

Prerequisites are other courses, knowledge, skills, or permission that must be obtained or completed before a student enrolls in a course. Students who believe they possess equivalent knowledge or skills through prior coursework or experience should see the divisional associate dean or seek the instructor's permission to enter a course.

Co-requisites are other courses, knowledge, skills, or permissions that must be taken or acquired simultaneously with the course in question.

Prerequisite/Co-requisite means the required course must be taken before or with the course in question.

Sample Course Listing

ACC 111 Office Accounting (3-0) 3 hours

course prefix | course number | course title | hours of lecture per week | hours of lab per week | semester hours of credit

IAI S1 900N - Illinois Articulation Initiative General Education Number
IAI Number

ACCOUNTING (ACC)

Business Division, Room A143, (847) 543-2041

ACC 112 Accounting Procedures I (3-0) 3 Hours
An introduction to basic accounting procedures in recording business transactions in journals and their periodic summary in ledgers for the purpose of preparing Financial Statements for simple business organizations.
Prerequisite: Language and Math Proficiency

ACC 113 Financial Statement Analysis (3-0) 3 Hours
This course focuses on the analysis of financial statements by studying the individual components of those statements and how they are accounted for. Specifically the course will cover the accounting for cash, receivables, inventory, plant assets, debt and equity for both corporations and partnerships, as well as, financial statement analysis and the statement of cash flows. Upon completion of the course, students will be able to interpret financial statements of businesses/corporations in order to assist them in making more informed business/financial decisions.
Prerequisite: ACC 112 or ACC 121

ACC 114 Payroll Accounting (3-0) 3 Hours
A practical study of current Social Security, Income Tax, Employment and Unemployment laws and their effect on basic payroll accounting systems. Actual preparation of payroll records and tax returns that are required of business is included.
Prerequisite: ACC 112 or ACC 121

ACC 121 Financial Accounting (4-0) 4 Hours
Financial Accounting is a thorough coverage of financial accounting topics. The first part of the course provides a clear, concise coverage of the accounting cycle using the corporate structure to produce the general-purpose financial statements: Income Statement, Statement of Retained Earnings, Balance Sheet and Statement of Cash Flows. The remainder of the class covers financial topics that will enhance the student's understanding of the general-purpose financial statements and of corporate financing through the use of debt and equity.
NOTE: Minimum time for classwork and homework is 12-15 hours per week. The department assumes that you have business math and reading proficiencies. Prior enrollment in BUS 121 recommended.
Prerequisite: Language and Math Proficiency
Course fee

ACC 122 Managerial Accounting (4-0) 4 Hours
This course emphasizes Managerial Accounting, focusing on the internal rather than the external aspects of business transactions. This course is for students seeking an AAS accounting degree or following a transfer program. Students pursuing an AAS non-accounting degree could be taking ACC 113. It is recommended that the students have obtained a "C" or better in ACC 121 and completed an introductory microcomputer course such as CIS 119 or CIS 120 or DPR 175.
NOTE: Minimum time for classwork and homework is 12-15 hours per week.
Prerequisite: ACC 121

ACC 171 Accounting Information and Computer Systems (3-0) 3 Hours
This course covers the financial accounting cycle using an information systems approach. Business documents will be used to generate business transactions. Students will learn to use an integrated accounting software package.
Prerequisite: ACC 122 or ACC 113 - AND - CIS 119 or CIS 120 or DPR 175
Course fee

ACC 212 Federal Tax Accounting I (3-0) 3 Hours
Federal Tax Accounting I involves the practical study of Federal Tax Law as related to the individual and sole proprietorship. Topics covered include history of Federal Income Tax, Personal and Dependency Exemptions, Cash and Accrual Methods, Gross Income inclusions and exclusions, Depreciation Methods, Property Transactions, Realization and Recognition of Gain or Loss, Deductions for and from Adjusted Gross Income (AGI), Itemized Deductions, Passive Activity rules and Tax Credits.
NOTE: This course is for serious students and will require approximately three hours of homework for each hour in class.
Prerequisite: ACC 112 or ACC 121

ACC 213 Federal Tax Accounting II (3-0) 3 Hours
This course represents an introduction to corporate, partnership, trust, estate and exempt entity taxation. The student will become familiar with various related subjects including Alternative Minimum Tax, Accumulated Earnings Tax, Gift and Estate Tax and International Taxation. The overall emphasis of the course will be on corporate taxation and related effects to shareholders.
Prerequisite: ACC 212

ACC 214 Cost Accounting I (3-0) 3 Hours
Cost Accounting as a tool for management is emphasized throughout the course. Students will study topics such as cost-volume-profit relationships, budgeting, standard costs, responsibility accounting and job-order and process costing. Traditional methodology is emphasized. Contemporary methodology and concepts relating to ABC and JIT accounting are introduced.
Prerequisite: ACC 122

ACC 221 Intermediate Accounting I (3-0) 3 Hours
An intensive study of financial accounting theory and procedures involving the topical areas of accounting standards and theory development, the statements of income, retained earnings, and financial position, time value of money, cash, receivables, inventory, and current liabilities. Recommended the student have obtained at least "C" grades or better in Financial and Managerial Accounting. CIS 119 or DPR 175 or CIS 120 is also recommended.
Prerequisite: ACC 122

ACC 222 Intermediate Accounting II (3-0) 3 Hours
An intensive continuation of the study of financial accounting theory and procedures involving the topical areas of accounting for property, depreciation, non-monetary transactions, intangible assets, long term liabilities, shareholder equity, investments, revenue recognition, financial analysis, and preparation of the Statement of Cash Flows.
NOTE: It is recommended that the student have obtained at least a grade of "C" or better, in Intermediate Accounting I.
Prerequisite: ACC 221

ACC 223 Intermediate Accounting III (3-0) 3 Hours
An intensive continuation of the study of financial accounting theory and procedures involving the specialized areas of accounting changes and error analysis, dilutive securities and earnings per share, accounting for pensions, income tax allocation, leases, interim financial reporting, and the principles of full disclosure.
Prerequisite: ACC 221

ACC 270 Advanced Accounting (4-0) 4 Hours
Advanced accounting includes the study of accounting theory and practice as it relates to business combinations and consolidated financial statements, accounting and reporting for governmental and not for profit organizations, and the accounting for equity transactions for partnerships. This course is recommended for students who plan to sit for the CPA exam and practicing accountants needing further study of the above described topics.
Prerequisite: ACC 222

ACC 271 Auditing (3-0) 3 Hours
An intensive study of auditing theory and procedures involving the topical areas of audit reporting, auditing standards and evidence, statistical sampling, evaluation of the control structure, and electronic data processing. The legal and ethical dimensions of auditing will also be examined with emphasis on how government affects financial reporting through court decisions, federal securities laws, the SEC, the Foreign Corrupt Practices Act and the Treadway Commission Report.
Prerequisite: ACC 222

ADMINISTRATIVE OFFICE SYSTEMS (AOS)

Business Division, Room A143, (847) 543-2041

AOS 111 Business Communications (3-0) 3 Hours
A course designed to improve communication skills and to enhance effective communication within a diverse work force. Writing business documents and communicating in a clear and concise manner are emphasized. This course prepares a student for career success in a team environment and develops the skills that are needed to communicate using today's advanced technology. Sentence and paragraph construction, grammar and punctuation, document formatting, techniques in composing and evaluating business letters, employment letters, resumes, memorandums, and electronic messages are some of the topics that are covered.
Prerequisite: Language Proficiency

AOS 112 Automated Office Technologies (3-0) 3 Hours
This course provides a comprehensive study of the use of computers and technologies for office personnel. Class topics include computer hardware, software, operating systems, and electronic communications such as e-mail, the Internet, and Networks. Students will have an opportunity to analyze purchasing strategies in order to obtain a computer, as well as acquire knowledge on data security and storage. Hands-on software experience will be provided utilizing the Internet, e-mail, and Word, Excel, and Access components of Office 2000.
Prerequisite: Language Proficiency
Course fee

AOS 113 Comprehensive Word Processing (3-0) 3 Hours
This is a comprehensive course in the use and operation of word processing software on a microcomputer. Topics covered include entering, editing, formatting, saving, retrieving, using writing tools, and printing varied documents. Advanced and specialized topics to be covered include tables, merge, macros, outlining, templates, footnotes/endnotes, headers/footers, page numbering, hyphenation, search and replace, and graphics. Several projects will be completed during the semester.
Prerequisite: Language Proficiency
Course fee

AOS 117 Machine Transcription (3-0) 3 Hours
This course integrates word processing and typing skills with the application of advanced rules of punctuation, grammar, capitalization, word usage, sentence structure, and formatting to machine-transcribed business documents. Proofreading and editing techniques will be covered.
NOTE: Language skills proficiency is required. If deficient, concurrent enrollment is recommended in ENG 103 and/or ENG 104.
Prerequisites: AOS 113 or BSS 113 and AOS 128 or BSS 128 and AOS 172 or BSS 172
Course fee

AOS 118 Advanced Word Processing/ Desktop Publishing (2-0) 2 Hours
Students gain specialized understanding of the operations and applications of word processing software on microcomputers with the incorporation of Desktop Publishing. Topics to be covered include becoming familiar with basic Desktop Publishing terminology, document set up, graphics, typestyles, typographic refinements, styles, design principles, forms creation, and converting to HTML format for Web publishing. Students will plan and produce documents such as business cards, flyers, newsletters, etc., combining text with graphics.
Prerequisite: AOS 113 or BSS 113
Course fee
May be taken twice for credit toward degree

AOS 119 Records Management (2-0) 2 Hours
This course will introduce records and data management including the creation, storage, control, use, and disposition of records. It will include the ARMA (Association of Records Managers and Administrators, Inc.) compatible indexing rules; managing paper and electronic systems; numeric, geographic and subject systems; and database software use.
Prerequisite: Language Proficiency

AOS 122 Business Mathematics (3-0) 3 Hours
Application of arithmetic in business. Areas of study include review of fractions and decimals, equations, percentage, discounts and pricing, simple and compound interest (present and future value), inventory, depreciation, and installment buying.
Prerequisite: Language and Math Proficiency

AOS 128 Intermediate Keyboarding (3-2) 4 Hours
Intermediate Keyboarding focuses on two goals: increasing speed/accuracy on straight-copy timings and increasing the production rate of basic office documents. The formatting of commonly used office documents is covered thoroughly.
NOTE: This course includes out-of-class assignments
Course fee

AOS 170 Computer Keyboarding I (1.5-1) 2 Hours
This course is designed to teach the alphabetic keyboard using proper "touch" keyboarding techniques. AOS 170 meets the needs of individuals seeking basic keyboarding skills for microcomputers, and provides the initial instruction leading to an employable skill level. Emphasis will be placed on building speed and accuracy.
NOTE: This course includes out-of class assignments.
Course fee

AOS 171 Computer Keyboarding II (1.5-1) 2 Hours
This course is designed to continue to build speed and accuracy skills on the alphabetic keyboard using proper "touch" keyboarding techniques. The numeric/symbolic keyboard and proper formatting of basic business documents used in today's offices will be introduced.
NOTE: This course includes out-of-class assignments.
Course fee

AOS 172 Business English (3-0) 3 Hours
This course is designed to teach the application of standard rules of business English necessary to assure accuracy in written communications in the business office. Course includes an intensive coverage of correct business word usage, punctuation, grammar, and sentence structure. Proofreader's marks and techniques used to improve proofreading are included.
Prerequisite: Language Proficiency

AOS 175 Keyboarding Speed and Accuracy Building (1.5-1) 2 Hours
This course is for students with intermediate skill levels who wish to improve their speed and accuracy on the microcomputer. AOS 175 focuses on one goal: increasing keyboarding speed and accuracy on straight-copy timings.
NOTE: This course includes out-of-class assignments.
Course fee
May be taken twice for credit toward degree

AOS 214 Administrative Office Procedures (3-0) 3 Hours
This course will prepare students for the role of the professional office manager in today's global job market. Topics to be covered include defining the administrative office manager, understanding basic forms of organizations, developing problem solving skills, recruiting and orienting a culturally diverse workforce, and analyzing office jobs, salaries, benefits, and workplace issues. Also covered will be resume writing, travel arrangements, planning meetings and conferences, telecommunications, time management, and mailing systems.
Prerequisite: Language Proficiency

AOS 215 Presentation Software (2-0) 2 Hours
This course is an introduction to the fundamentals of Microsoft's PowerPoint, a creative new program used to develop multimedia presentations. Topics to be covered include creating colorful and effective slides consisting of words, charts, animation, sound and graphics that can be produced on a computer screen, note pages, audience handout pages, or posted on the Web. This course is designed for individuals in business, education or sales who need to prepare professional presentations. Integration features of linking and embedding between Word and Excel will be covered, and participants will create an individual end project. DPR 191, Introduction to Windows, or Windows experience is recommended..
Prerequisite: Language Proficiency
Course fee

AOS 216 Integrated Office Projects (3-0) 3 Hours
Students will have the opportunity to complete integrated projects that represent what is required in an actual business environment. Students will use the components of Microsoft Office (Word, Excel, PowerPoint, Access, Outlook and the Internet). This is a capstone course that requires the integration of previously learned skills.
Prerequisites: AOS 113 and AOS 112 or DPR 175 or CIS 119

AOS 223 Advanced Keyboarding (2-2) 3 Hours
Advanced Keyboarding focuses on two goals: increasing speed/accuracy on straight-copy timings and increasing the production rate of complex and specialized documents.
NOTE: This course includes out-of-class assignments.
Prerequisite: AOS 128 or BSS 128
Course fee

AOS 225 Practicum in Secretarial Science (0-15) 3 Hours
Practicum is designed for secretarial students who have at least two years of full-time secretarial experience and are presently employed in that field. Use of projects oriented to various interests of individual students in solving present-day office problems and how various decisions will affect them.
Prerequisite: Last semester standing

AOS 299 Selected Topics in Office Automation (Variable) 1-3 Hours
Designed to meet the needs of students for specialized instruction in current office automation topics.
NOTE: Topics will be identified for each section of the course; prerequisite depends upon the selected topic.
Course fee
May be taken four times, but any topic only once

ADULT BASIC EDUCATION (ABE)

Community Education and Economic Development Division, Building 4, (847) 543-2021

The Adult Education program is funded in part by grants from the federal government totalling $313,858. This represents 30% of the total cost of the program.

ABE courses do not apply to any associate degree or career certificate.

ADULT BASIC EDUCATION (ABE) includes individualized programs of real-life applications in reading, writing, and mathematics for students who have not completed a high school diploma. ABE courses do not apply to any associate degree or career certificate.

Students enrolling in college level instruction and students entering the college on Fl visas are not eligible for tuition free adult education classes.

ABE 1 Adult Basic Education I (3-0) 3 Hours
This course is an individualized program in reading, language development, mathematics and life-coping skills. Students progress at their own rates through basic reading, writing and arithmetic skills.
Course fee
May be taken four times for credit

ABE 2 Adult Basic Education II (3-0) 3 Hours
This is a program designed to teach and review basic reading, writing, and mathematics skills necessary to function satisfactorily in daily life. The program takes an individualized approach. Students' needs determine level and kinds of materials used.
Course fee
May be taken four times for credit

ABE 2 Adult Basic Education II (3-0) 3 Hours
This is a program designed to teach and review basic reading, writing, and mathematics skills necessary to function satisfactorily in daily life. The program takes an individualized approach. Students' needs determine level and kinds of materials used.
Course fee
May be taken four times for credit toward degree

ABE 3 Pre General Educational Development (3-0) 3 Hours
This is an individualized program in general language development and mathematics. Students progress at their own rates in reading comprehension, English grammar, spelling and punctuation, as well as in mathematics. The program is designed to raise basic skills in mathematics, reading and language to a level which will enable students to pursue the GED program.
Course fee
May be taken four times for credit

ABE 3 Pre General Education Development (3-0) 3 Hours
This is an individjalized program in general language development and mathematics. Students progress at their own rates in reading comprehension, English grammar, spelling and punctuation, as well as in mathematics. The program is designed to raise basic skills in mathematics, reading and language to a level which will enabale students to pursue the G.E.D. program..
Course fee
May be taken four times for credit toward degree

ABE 10 Literacy I (3-0) 3 Hours
This is an individualized program of instruction that focuses on developing literacy skills in reading, writing and arithmetic. The course is designed to meet each student's personal goals.
Course fee
May be taken four times for credit

ABE 11 Literacy II (3-0) 3 Hours
This course is a continuation of ABE 010. Students will continue to progress at their own rates through basic literacy skills in reading, writing and arithmetic. The program is designed to raise students' basic skills in these areas to the third grade level.
Course fee
May be taken four times for credit

ABE 20 Beginning Adult Basic Education I (3-0) 3 Hours
This is an individualized program of instruction for students with limited reading, writing, language, arithmetic and life skills development. Students will progress and master the basic skills at their own rate. Students' needs determine level and kinds of materials used.
Course fee
May be taken four times for credit

ABE 21 Beginning Adult Basic Education II (3-0) 3 Hours
This course is a continuation of ABE 020, enabling students to progress to the next level of education. It will review, teach and maintain the basic skills. Students will progress at their own rate. Students' needs determine level and kinds of materials used.
Course fee
May be taken four times for credit

ABE 30 Intermediate Adult Basic Education I (3-0) 3 Hours
This course will focus on group learning situations and is intended for students who want to progress and master the basic skills. Course instruction will include reading, language development, writing and mathematics. Students may progress at their own rate.
Course fee
May be taken four times for credit

ABE 31 Intermediate Adult Basic Education II (3-0) 3 Hours
This course is a continuation of ABE 030. Course instruction will include reading, language development, writing and mathematics. Students will be able to identify the ways to help them in reading a variety of materials. The course will focus on individualized instruction as well as group learning situations.
Course fee
May be taken four times for credit

ABE 40 Advanced Adult Basic Education I (3-0) 3 Hours
This course focuses on instruction in reading, language development and mathematics, as well as problem-solving skills. Real-life applications including work-related skills will be covered. Students' needs determine level and kinds of materials used.
Course fee
May be taken four times for credit

ABE 41 Advanced Adult Basic Education II (3-0) 3 Hours
This course is a continuation of ABE 040. It is designed to teach and review basic reading, writing, mathematics, and problem-solving skills. Real-life applications including work-related skills will be covered. Students' needs determine level and kinds of materials used.
Course fee
May be taken four times for credit

ABE 50 Pre-General Educational Development I (3-0) 3 Hours
This course is an individualized program in general language development and mathematics. Students progress at their own rates in reading comprehension, English grammar, spelling, and punctuation as well as mathematics. The program is designed to raise basic skills in mathematics, reading, and language to a level which will enable students to pursue the GED program.
Course fee
May be taken four times for credit

ABE 51 Pre-General Educational Development II (3-0) 3 Hours
This course is a continuation of ABE 050. Students will continue to progress at their own rates through reading comprehension, English grammar, spelling, and punctuation as well as mathematics. The program is designed to raise basic skills in mathematics, reading, and language to a level which will enable students to pursue the GED program.
Course fee
May be taken four times for credit

ADULT EDUCATION (ADE)

Community Education and Economic Development Division, Building 4, (847) 543-2021

HIGH SCHOOL COMPLETION classes are for adults 19 years and older who have separated from a secondary educational system and want to complete their high school graduation requirements to earn a regular diploma.

ADE courses do not apply to any associate degree or career certificate.

Students enrolling in college level instruction and students entering the college on F1 visas are not eligible for tuition free adult education classes.

ADE 8 Constitution Workshop (.5-0) 0.5 Hour
Preparation for students who need to pass the U.S. and State of Illinois Constitution Exam either for the GED , College of Lake County Graduation or Illinois Teaching Certificate requirement. The workshop will stress vocabulary, government structure
Course fee
May be taken four times for credit

ADE 16 Back to School (Variable) 1-4 Hours
Notetaking, listening, textbook reading and time management are some of the topics presented in this course. An individualized approach based on needs of students will be used.
Course fee
May be taken four times for credit

ADE 17 Reading Power (Variable) 1-4 Hours
Instruction that includes reading comprehension, vocabulary development and related study skills is designed to review as well as enhance the ability to cope with new situations.
Course fee
May be taken four times for credit

ADE 19 Basic Math Review (1-0) 1 Hour
This course is geared toward the ABE, GED or returning students who needs specialized help in math. The review will start with whole numbers. Additional areas to be covered include addition, subtraction, multiplication, division, fractions, and decimals.
Course fee
May be taken four times for credit

ADE 25 Special Problems in English as a Second Language (1-2) 2 Hours
This course is for limited English proficiency students at the upper beginning to advanced level who have attained proficiency in some skill areas of English but who have special problems in other specific areas because of interference from their native language. Students will learn to distinguish more accurately the sounds heard in American English and to pronounce these sounds more clearly in words and phrases. They will be able to use the English orthographic system and will learn the rules of formation of words and sentences in writing.
Course fee
May be taken four times for credit

ADE 30 Pre-Employment English as a Second Language: Beginning (Variable) 1-4 Hours
This course is for students who have little or no knowledge of English. Students will learn to speak, read and write English with a pre-employment focus. They will practice speaking and writing personal information about themselves, reading and using transportation schedules and identifying and purchasing clothing items.
Course fee
May be taken four times for credit

ADE 31 Pre-Employment English as a Second Language: Intermediate I (Variable) 1-4 Hours
This class is for students who can already speak and write about present events in English and can answer basic information questions about themselves. Students will improve speaking, reading and writing skills with a pre-employment focus. They will learn to use possessives, adverbs of manner, modals and past tense verbs. They will gain survival skills in areas of housing, utilities, cars and food and will learn rights and responsibilities of employers and employees.
Course fee
May be taken four times for credit

ADE 32 Pre-Employment English as a Second Language: Intermediate II (Variable) 2-4 Hours
This class is for students who are able to communicate about past and present events and have a good basic vocabulary. Students will sharpen their speaking, reading and writing skills with a pre-employment focus. They will learn to use future tense, negative, two-word verbs and comparative adjectives. They will learn about kinds of jobs, how to fill out job applications and how to have a successful job interview.
Course fee
May be taken four times for credit

ADE 33 Pre-Employment English as a Second Language: Advanced (Variable) 2-4 Hours
This class is for students who are already able to use various verb tenses and grammatical structures and many vocabulary items. Students in this class will refine their speaking, reading and writing skills with a focus on pre-employment. They will learn to use present perfect verbs, superlative adjectives, impersonal expressions, modals in various tenses and comparisons of adverbs. They will gain survival skills in the areas of budgeting, taxes, insurance, banking and understanding the paycheck.
Course fee
May be taken four times for credit

ADE 40 English as a Second Language in Pre-GED: Beginning I (Variable) 1-2 Hours
For students who have little or no proficiency in English. This course will emphasize speaking but will also include instruction in listening, reading, and writing skills. It will teach basic English grammar as it relates to personal information.
Course fee
May be taken four times for credit

ADE 41 English as a Second Language in Pre-GED: Beginning II (Variable) 1-2 Hours
Students taking this course have little or no proficiency in English. This course emphasizes speaking but will include listening, reading, and writing skills. Students will learn basic English grammar as it relates to reading a newspaper, train and bus schedules, and identifying articles of clothing, appliances, and household items.
Course fee
May be taken four times for credit

ADE 42 English as a Second Language in Pre-GED: Beginning III (Variable) 1-2 Hours
Students taking this course have little or no proficiency in English. The course emphasizes speaking but includes listening, reading, and writing skills. Students will learn basic English grammar as it relates to survival in an American community.
Course fee
May be taken four times for credit

ADE 43 English as a Second Language in Pre-GED: Intermediate I (Variable) 1-2 Hours
For students who have a minimal knowledge of basic English grammar and can communicate orally and graphically in present and past tense. Besides grammar, students will learn about the human body, weather and the solar system.
Course fee
May be taken four times for credit

ADE 44 English as a Second Language in Pre-GED: Intermediate II (Variable) 1-2 Hours
For students who have a minimal knowledge of basic English grammar and can communicate orally and graphically in present and past tense. They will learn future and past continuous; recognize a sentence, clause, and phrase; locate main ideas, supporting details, and simple inferences on reading passages.
Course fee
May be taken four times for credit

ADE 45 English as a Second Language in Pre-GED: Intermediate III (Variable) 1-2 Hours
Students in this course have a minimal knowledge of basic English grammar and can communicate orally and graphically in present and past tense. They will learn future tense with "will", present perfect, modals, infinitives, and phrasal verbs. They will learn basic content relating to Social Studies and Science GED tests, including the study of plants and behavioral science.
Course fee
May be taken four times for credit

ADE 48 English as a Second Language in Pre-GED: Advanced III (Variable) 1-2 Hours
This class is for students who have achieved communicative competence but wish to refine listening, speaking, reading, and writing skills. Students will review all conditional tenses and study the passive voice and learn content in advanced areas relating to the Social Science GED test and the Constitution test.
Course fee
May be taken four times for credit

ADE 504 U.S. History-Government/ Citizenship (4-0) 4 Hours
For those who are proficient in reading, writing and speaking English and need to gain knowledge about U.S. government and history in order to pass the Immigration and Naturalization Service Citizenship Exam.
Course fee
May be taken four times for credit

ADE 701 Career Development I (1.5-0) 1.5 Hours
Students will research a career plan for themselves to begin their job search in the computerized world of business.
Course fee
May be taken four times for credit

ADE 702 Career Development II (1.5-0) 1.5 Hours
Students will develop a positive and professional career self-image and will be able to apply a variety of interview and job seeking techniques to successfully obtain employment.
Prerequisite: ADE 701
Course fee
May be taken four times for credit

ADE 703 Independent Job Search (1-0) 1 Hour
This intensive course will advise students on preparing for, obtaining and maintaining employment. The course will provide interviewing skills development, application completion, proper attire and resume information as needed.
Course fee
May be taken four times for credit

ADE 910 Practical Math I (2-0) 2 Hours
This course covers the basic arithmetic functions necessary for home, business and industry.
Course fee

ADE 911 Practical Math II (2-0) 2 Hours
This course covers the advanced arithmetic functions to manage a home, or work in business and industry.
Course fee

ADE 912 Level One Algebra (2-0) 2 Hours
This course will cover integers, variables, and linear equations. Emphasis will be placed on word problems.
Course fee

ADE 913 Level Two Algebra (2-0) 2 Hours
This course will cover the use of binomials, factoring, solving quadratic equations, and quadratic formula.
Course fee

ADE 920 English Fundamentals (2-0) 2 Hours
This course is designed to help individuals improve their written and oral English skills, usage, logic and organization.
Course fee
May be taken three times for credit toward degree

ADE 924 American Literature (2-0) 2 Hours
This independent study course will introduce students to three genres of American literature: The Short Story, The Nonfiction Essay, and The Novel. The course is designed to improve the students' reading, thinking, writing, and vocabulary skills through the study of American literature.
Course fee

ADE 925 Advanced Literature (2-0) 2 Hours
This course will introduce students to three novels, each novel being one unit of study. Each unit will include vocabulary which will aid students in the understanding of the literature being read.
Course fee

ADE 930 U. S. History through the Civil War (2-0) 2 Hours
This course will examine the growth and development of the United States to the Civil War and Reconstruction. Exploration, colonization and economic growth through the Civil War and Reconstruction will be covered.
Course fee

ADE 931 U. S. History Civil War to the Present (2-0) 2 Hours
This course will cover the growth and development of the United States from the Civil War to the present. It will also focus on the development of urban America, growth of industry, effects on world trade, World Wars I and II, post-war growth and development and space exploration and the computer age.
Course fee

ADE 940 General Science (2-0) 2 Hours
This course will provide an overview of general science concepts in biology, chemistry, earth science, and physics.
Course fee

ADE 941 General Science II (2-0) 2 Hours
General Science II is an extension of General Science I. In this course, students will study the plant and animal kingdoms, and human biology.
Course fee

ADE 950 Consumer Education (2-0) 2 Hours
This course is designed to cover the complex issues of budgeting, insurance, credit, taxation, home buying and care, investments and banking. It will also focus on problem solving and critical thinking skills.
Course fee

ADE 951 Family Life I (2-0) 2 Hours
This independent study course is designed to give students insight into single, married, and family life.
Course fee

ADE 952 Health I (2-0) 2 Hours
Health I is designed to introduce students to general health concepts in living. This course includes the study of consumer health; care of the body; nutrition; and the effects of drugs, smoking, and alcoholic beverages on behavior.
Course fee

ADE 953 Family Life II (2-0) 2 Hours
This course is an extension of Family Life I and is designed not only to give further insights into single, married and family life, but also to give students key ideas in how to make important life decisions and how to handle responsibility.
Course fee

ADE 954 Health II (2-0) 2 Hours
Health II is an extension of Health I. This course includes the study of prevention of diseases; chronic health conditions; the environment and community health; accident prevention; family life education; and social health.
Course fee

ADE 956 Psychology I (2-0) 2 Hours
Psychology I is an independent study course designed to introduce students to the basic principles and applications of psychology.
Course fee

ADE 957 Psychology II (2-0) 2 Hours
Psychology II is an extension of Psychology I. The course is designed to give students an indepth study of the human mind and its mental processes.
Course fee

ADE 960 Accounting Procedures I (2-0) 2 Hours
This course is an introduction to the fundamentals of accounting as they apply to: the establishing of an accounting system for sole-proprietorships and partnerships, the recording of business transactions in a variety of journals and ledgers, and the preparation of financial statements for a fiscal period. Also included will be a refresher in business mathematics and those principles which apply to accounting.

ANTHROPOLOGY (ANT)

Social Science Division, Room A244, (847) 543-2047

ANT 121 Introduction to Anthropology (3-0) 3 Hours
This course is an introductory survey of basic concepts in the fields of anthropological concern-archaeology, physical anthropology, and cultural anthropology. Emphasis in this study of human behavior shall be on the more physical aspects of the evolutionary development of man.
Prerequisite: Language Proficiency
IAI: S1 902

ANT 221 Cultural Anthropology (3-0) 3 Hours
This course is a study of the nature and development of culture. The economic, political, religious and social organizations of selected human groups are examined, compared and evaluated. It explores the cultural determinations of individual human behavior and means of adaptation.
Prerequisite: Language Proficiency
IAI: S1 901N

ANT 224 Introduction to Archaeology (3-0) 3 Hours
This course is a survey of the concepts and methods essential to the study of prehistoric cultures with emphasis on the prehistoric cultures of the Americans. Topics include site location, techniques of excavation, methods of dating artifacts and sites, analysis of artifacts, reconstruction of culture history and cultural resource management.
Prerequisite: Language Proficiency
IAI: S1 903

ANT 226 Field Methods (3-0) 3 Hours
This course is an introduction to the techniques of field archaeology and includes instruction in excavation and recording, exploratory surveys, and mapping, project planning, research design, laboratory analysis, and preparation of research reports. The class will be conducted at an approved archaeological site, such as the Mayflower Archaeological Preserve in Belize, Central America. The course will be comprised of actual field work along with lectures and discussion.
Prerequisite: Language Proficiency

ARABIC (ARA)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

ARA 121 Elementary Modern Standard Arabic I (4-0) 4 Hours
An introduction to the phonology and writing systems of modern standard Arabic and its basic vocabulary and fundamental structures. This course offers combined training in listening, speaking, reading, and writing through dialogues, texts, and narratives with historical, literary, and religious content.

ARA 122 Elementary Modern Standard Arabic II (4-0) 4 Hours
A continuation of the mastery of Arabic phonology, basic vocabulary, and fundamental syntax. This course puts emphasis on oral reading and writing practice based on selected texts from Islamic literature, including the Qur'an and Hadith.
Prerequisite: ARA 121

ARA 221 Intermediate Modern Standard Arabic I (4-0) 4 Hours
Expansion of the student's understanding of the Arabic language with active vocabulary and structure and the development of reading and oral skills. Selected readings include texts and narratives from various genres of Arabic prose literature.
Prerequisite: ARA 122

ARA 222 Intermediate Modern Standard Arabic II (4-0) 4 Hours
A continuation of ARA 221, aiming at developing a command of Arabic structure, fluency in reading, speaking, comprehension, and writing skills.
Prerequisite: ARA 221

ARCHITECTURAL TECHNOLOGY (ARC)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

ARC 121 Architectural Graphics (2-3) 3 Hours
A course which presents the fundamental principles of graphical communications for the Architectural student in architectural terms. It enables development of student skills in the use of technical drawing equipment as well as Computer Aided Design (CAD) software to draw various architectural drawings.
NOTE: High school drafting and/or CAD experience is recommended but not required.
Course fee

ARC 170 Architectural Design (2-3) 3 Hours
This course enables the student to become familiar with the basic principles and considerations involved in the functional aesthetic aspects of architectural design. The course further provides the student with practical "hands on" experience in solving architectural design problems.
NOTE: Completion of Architectural Graphics (ARC 121) or an equivalent drawing course is recommended. Some knowledge of architectural materials and construction techniques will be helpful.
Prerequisite: Language and Math Proficiency
Course fee
Offered spring only.

ARC 171 Architectural Working Drawings (2-3) 3 Hours
Provides the student with the knowledge and skills necessary to draw detailed building construction documents. Students draw site plans, foundation plans, floor plans, elevations, wall sections, full sections, and various details.
Prerequisite: ARC 121
Course fee
Offered fall only.

ARC 211 Structural Steel Design (2-3) 3 Hours
Relating of structural steel components to a total structural system.
NOTE: Student must furnish basic required equipment.
Prerequisite: EGR 215

ARC 214 Reinforced Concrete and Timber Design (2-3) 3 Hours
Relating concrete and timber structure components to total structural system.
NOTE: Student must furnish basic required equipment.
Prerequisite: EGR 215

ARC 215 Architectural Planning (2-3) 3 Hours
Provides the student with a practical problem-solving situation under job-like conditions. The student will synthesize all information previously learned to complete a building design project. This practical project will take the entire semester to complete and will incorporate information from all previous course work in the Architecture Program.
NOTE: Fourth semester standing in the Architectural Program and departmental advisement are recommended.
Course fee

ARC 216 Architectural Illustration (2-3) 3 Hours
Students will use Computer Aided Design (CAD) to create 2D illustrations and rendering of interiors and exterior of buildings to produce professional presentation quality drawings often termed "Artists Conception."
Prerequisite: ARC 121
Course fee
Offered spring only.
Offered even years only.

ARC 228 History of Architecture (3-0) 3 Hours
Study of key monuments in Western architecture from Egyptian period to contemporary, including social and economic conditions which produce style. Emphasis is placed on illustrative local architecture.
Prerequisite: Language Proficiency

ARC 271 Architectural Working Drawings II (2-3) 3 Hours
Course designed to prepare students to complete working drawings of commercial construction including: site plans, foundation systems, floor systems, wall systems, roofing and mechanical systems in buildings.
Prerequisite: ARC 121
Course fee
Offered spring only.
Offered odd years only.

ART (ART)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

ART 111 Printing Production (3-0) 3 Hours
Survey of the graphic arts process from the written copy to the printed piece, using technical aspects of digital print production. Overview of electronic print technology. Students will learn terminology to communicate with others in the field. Specific units on using draw software (object-oriented graphics) and paint software (bitmapped images), graphic design, typography, and color. First half of course covers computer prepress including all software needed for art preparation. Second half covers printing methods.
Course fee

ART 121 Introduction to Art (3-0) 3 Hours
This course will introduce students to an appreciation of the visual arts through an intercultural, social/historical approach. The course will also emphasize the nature of the creative process, integrating a study of the conceptual principles, with methods and materials which influence artistic critical thinking, problem solving, exploration, and discovery.
Prerequisite: Language Proficiency
IAI: F2 900

ART 122 Basic Color and Design (0-6) 3 Hours
A basic studio experience for those interested in fine arts, commercial arts or art education. The student carries out a series of problems relating to the elements and principles of design. The course develops the students' organizational abilities and technical skills. Focus on verbal and visual definitions of terms and concepts used by artists and designers.

ART 123 Color and Design Techniques (0-6) 3 Hours
A studio experience: continuation of ART 122 using a variety of media and concentration on technique and color development.
Prerequisite: ART 122

ART 124 Basic Drawing (0-6) 3 Hours
Introduction to basic objective drawing techniques using a variety of materials including pencil, crayon, brush, pen and ink.

ART 125 Art for Elementary Teachers I (0-4) 2 Hours
A basic studio experience open to all students but designed for those majoring in general elementary education and those who are already teaching or working in some capacity with children at the elementary level. The student will be given practical experience in carrying out a series of problems and projects relating to elements and principles of design, various craft forms, materials and methods used in the teaching of art.
NOTE: This course is primarily designed as a methods course for those people who would wish to become elementary art teachers.
Course fee

ART 126 Art for Elementary Teachers II (0-4) 2 Hours
Designed as a continuation of ART 125 to provide additional studio experience in greater depth, especially in the areas of sculpture, ceramics and printmaking.
Prerequisite: ART 125
Course fee

ART 127 Intermediate Drawing (0-6) 3 Hours
Advanced problems of graphic communication through exploration of varied media and techniques.
Prerequisite: ART 124
Offered fall and spring only.

ART 128 Watercolor (0-4) 2 Hours
Understanding of methods and techniques of water-soluble painting media and developing problems of composition.

ART 129 Introduction to Photography I (2-2) 3 Hours
An introductory course in black and white photography. Principles of the photographic process from picture taking to printing are introduced with emphasis placed on historical photographs to illustrate these principles. The course includes the proper use of cameras, darkroom equipment, film processing, printing and elements of photographic composition. Designed for students with little or no background in photography.
NOTE: Students are required to provide their own 35mm camera which can be manually operated.
Course fee

ART 149 Photographic Electronic Imaging (2-2) 3 Hours
Photographic Electronic Imaging I covers the production, manipulation, and output of photographic images using the computer and digital imaging equipment. Students will learn to output images to paper print or to a multimedia presentation format. The course is concerned with photographic image manipulation within the context of the student's own personal aesthetic, from a historical perspective, and as part of the legal, moral, and social issues facing today's world. Possibilities for various commercial and fine arts applications will be assessed, including website development, video, advertising and illustration purposes, fine art prints, mixed media artwork, and multimedia presentations.

ART 220 Advanced Watercolor (0-4) 2 Hours
This course is a continuation of beginning watercolor with emphasis on advanced investigation of aesthetic concerns of water-based media. This investigation will include development of sophisticated ideas and techniques through directed experimentation. Various aqueous media will be explored through lecture demonstrations and projects. Illustrated lectures examining the history of watercolor as a viable expression in the visual arts will be included.

ART 221 Advanced Design (0-6) 3 Hours
Studio experience and study of three dimensional materials, forms, and concepts.
Prerequisite: ART 122
Offered fall only.

ART 222 Introduction to Computer Art (0-6) 3 Hours
This course presents a computer software-based approach to visual image manipulation and generation. It includes the integration of computer hardware, software, and peripheral devices as tools to manufacture, capture, and combine traditional and contemporary visual ideas as applied to art and design.
Course fee

ART 223 Introduction to Sculpture (0-6) 3 Hours
An introduction to the basic materials and techniques of the sculptor in the creation of three-dimensional forms.
Course fee
Offered fall and spring only.

ART 224 Beginning Painting (0-6) 3 Hours
Understanding of methods and techniques for the various painting media and developing problems of composition.

ART 225 Figure Drawing (0-6) 3 Hours
Continuation of basic drawing with the application of drawing techniques and concepts as related to the figure.
Prerequisite: ART 122 or ART 124
Course fee
Offered fall only.

ART 226 Introduction to Ceramics (0-6) 3 Hours
This course is designed to teach students basic pottery hand building, wheel throwing and glazing techniques.
Course fee
Offered fall and spring only.

ART 227 Advanced Painting (0-6) 3 Hours
Further study of methods and techniques of various painting media as well as problems of composition.
Prerequisite: ART 224

ART 228 Intermediate Sculpture (0-6) 3 Hours
Continues an understanding of the development of materials and processes necessary to transform ideas and concepts into three-dimensional forms. Technical information in materials and processes of welding, casting, and carving will be included.
Prerequisite: ART 223
Course fee

ART 229 Introduction to Photography II (2-2) 3 Hours
Advanced technical and artistic comprehension of blackand white photography will continue through camera and darkroom techniques and references to the history of photography. The student will develop skills through the development of a portfolio.
NOTE: Students are expected to provide their own 35 mm camera which can be manually operated.
Prerequisite: ART 129
Course fee
Offered spring only.

ART 240 History of Art I (3-0) 3 Hours
A survey of the history of the civilizations of the prehistoric era and the ancient world before 1400 by examination of specific works of art and architecture including artifacts and monuments from Mesopotamia, Egypt, Greece, Rome, India, Japan, Africa, AmerIndian/MesoAmerica, Early Christian/Byzantine, the Middle Ages, and the Middle East.
Prerequisite: Language Proficiency
Offered fall only.
IAI: F2 901

ART 241 History of Art II (3-0) 3 Hours
A survey of the history of the civilizations, countries, and culture areas from the dawn of the Renaissance tradition in Italy through the first nine decades of the 19th century in Western Europe, Asia, India, Africa, MesoAmerica/AmerIndian and the Middle East by means of exposure to specific works of art and architecture.
Prerequisite: Language Proficiency
Offered spring only.
IAI: F2 902

ART 242 History of Art III (3-0) 3 Hours
A survey of the schools, movements, and developments in the modern art of Europe and the United States from 1890 to the present. A brief survey of the art of Latin America and Asia will be included.
Prerequisite: Language Proficiency
IAI: F2 902

ART 243 Introduction to Printmaking I (0-6) 3 Hours
An introduction to printmaking as a fine art. Execution of prints in relief, intaglio, lithography and silkscreen processes.
Prerequisite: ART 124
Course fee

ART 244 Color Slides (3-0) 3 Hours
A non-darkroom course in color photography which covers color theory, color films, color filtration, and the historical and technical development of color photography. Color slide film will be used; however, there will be no color printing. Students must supply a camera, color film and processing, and a carousel slide tray.
Prerequisite: ART 129

ART 245 Introduction to Jewelry (0-6) 3 Hours
A beginning course in the design and fabrication of small three-dimensional objects. Emphasis will be on gaining an understanding of the aesthetic concerns of small scale metal work and the skills and techniques of producing jewelry as art. Students will design and learn processes while developing a sensitivity to techniques and ideas, while producing works that stress craftsmanship. Fundamentally, this course is an extension of sculpture and design in the third dimension into a utilitarian form; a balance between aesthetics and technique.
Course fee

ART 246 Intermediate Ceramics (0-6) 3 Hours
To familiarize the student with advanced techniques and principles of the clay medium; to develop style and personal statement by the student using these techniques and principles.
Prerequisite: ART 226
Course fee

ART 247 Advanced Ceramics (0-6) 3 Hours
The advanced class emphasizes individual proficiency with continued work on the potter's wheel, handbuilding techniques, kiln firing, glaze calculation and application.
Prerequisite: ART246
Course fee

ART 248 Individual Art Projects (0-6) 3 Hours
This course is designed to give the student with sophomore standing an ability to pursue interests in specific areas of art with instructor supervision in such cases where the student has already completed the course offerings in that area.
NOTE: Must have successfully completed all possible courses in a discipline, e. g., painting, printmaking, sculpture, design, drawing, photography or art history.
Prerequisite: Language Proficiency
Course fee

ART 249 Advanced Photographic Electronic Imaging (2-2) 3 Hours
This course covers techniques used by fine art and commercial photographers and graphic designers to enhance their images through manipulation, as well as the output of photographic images using the computer and digital imaging equipment. The course concentrates on building a portfolio that demonstrates a thorough knowledge of digital techniques such as paintstrokes, pastel and pencil marks, airbrush and shadowmaking, contour shading, and textural additions. Students will learn to retouch montage images and color prints using computer software. Output of images to paper print, or use in a multimedia presentation format will be the final objective. Possibilities for various commercial and fine arts applications will be assessed, including website development, video, advertising and illustration purposes, fine art prints, mixed media artwork, and multimedia presentations. Students will use their own cameras to produce images and import them into the computer for manipulation.
Prerequisite: Language Proficiency and ART 149

ART 260 History of Photography (3-0) 3 Hours
This course traces the historical development of photography as an art form from 1839 to the present. Discussions will begin with the pre-history of the camera obscure through the discoveries of the inventors of photography as an art form. Discussions will include critical analysis of types of photographs and aesthetic movements in photography. Multicultural/intercultural aspects and contributions of women in the photographic arts throughout history will be areas of discussion . The history of photography will particularly examine photographs for their aesthetic and humanistic values, discussing the ideas and beliefs of photographers within their cultural and social contexts. The changing roles of photographers in photography's first 150 years and contemporary topics and developments will be explored. Contributions of photography to the visual arts, drama, film, dance, music, and literature will be included. The impact that photography has made on our knowledge of global history will be included. A particular effort will be made to include non-western and third world countries as well as western civilizations.
IAI: F2 904

ART 262 Commercial Photography (2-2) 3 Hours
This is a course designed to instruct the photography student in specialized techniques used in the creation of saleable photographs, and use of photographic equipment for revealing the form and demonstration of products. Students will also learn techniques of documentary and journalistic photography. Students will explore the use of photographic lighting as a creative tool for product enhancement. Students will explore use of tungsten light and electronic flash in a studio setting.
Prerequisite: ART 129 and ART 229

ASTRONOMY (AST)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

AST 121 Introduction to Astronomy (3-2) 4 Hours
A one-semester survey course primarily for non-science majors. The course will provide an introduction to the basic concepts of astronomy. Topics will include: the solar system, evolution of stars, the Milky Way and beyond. Additionally, the tools and historical development of the science will be explored. Labs will include (but not limited to): Observations, measurements, data gathering and analysis, recording and identifying objects in the night sky. (Some night observations will be required.) Course is designed to meet the general education science lab requirement.
NOTE: Completion of MTH 108 is strongly recommended.
Prerequisite: Language and Math Proficiency
Course fee
IAI: P1 906L

AUTOMOTIVE COLLISION REPAIR (ABR)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

ABR 110 Non-Structural Repair I (2-4) 4 Hours
The course will focus on the design and construction of the modern automobile. The identification of hand and power tools as well as safety. It will also introduce the student to the theory and the basic fundamentals of sheet metal repair. Classroom and hands-on experience is utilized.
Course fee

ABR 111 Non-Structural Repair II (2-4) 4 Hours
This course will focus on panel replacement and alignment methods. Removing interior and exterior trim and hardware. Removing and adjusting moveable glass. Trouble shooting power locks, windows, seats and lighting systems. Classroom and hands-on work will be emphasized.
Prerequisite: ABR 110
Course fee

ABR 115 Automotive Welding (2-3) 3 Hours
Welding is an important part of collision repair on a modern automobile. This course will cover the common types of welding, including aluminum welding that are used on automobiles. Classroom discussions and hands-on welding will prepare you to take the I-CAR Welding Certification test.
Course fee

ABR 118 Automotive Plastic Repair (1-2) 2 Hours
A study of automotive plastics. The course focuses on identification and repair methods of all common types of plastics use in today's automobiles. Hands-on experience is utilized.
Course fee

AUTOMOTIVE TECHNOLOGY (AUT)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

AUT 170 General Automotive (4-0) 4 Hours
This course is designed for the beginning student in the Automotive Technology program or for the student who is interested in gaining a general knowledge of the major systems of the automobile. This course can be taken in place of AUT 174 to fulfill the requirements of the certificate or Associate of Applied Science degree program. This course will cover the basic function of systems and the parts that make up each system, the common modes of failure and common repair procedures. This course will not include any work in the laboratory.

AUT 171 Engine Rebuilding (4-2) 5 Hours
Rebuilding of engines, including theory, diagnosis, measurement, light machining, and correct reassembly procedures. The lubrication, cooling, and fuel support systems are included.
Course fee

AUT 172 Auto Electrical I (4-2) 5 Hours
Gives the beginning automotive technician the opportunity to gain an understanding of the theory, operation, and testing of basic electricity, the automotive battery, starting systems, charging systems, and ignition systems.
Course fee

AUT 173 Auto Electrical II (4-2) 5 Hours
Theory of operation, diagnosis, and repair of body wiring, lighting circuits, accessories, gauges and body aligning.
Prerequisite: AUT 172
Course fee

AUT 174 Applied Mechanics (Auto) (4-0) 4 Hours
Gives the beginning automotive technician the opportunity to increase his knowledge of certain mechanical actions and reactions related to the automobile, proper and safe use of hand and precision tools, and the use of common automotive supplies, such as bolts, gaskets, etc.

AUT 175 Braking Systems (4-2) 5 Hours
This course provides instruction in the theory of operation, diagnosis, and servicing of automotive drum and disc brake systems. Students will perform complete brake service including the proper machining of drums and rotors. Diagonally split brakes, four wheel discs, anti-lock systems will be covered.
Course fee

AUT 176 Suspension and Alignment (4-2) 5 Hours
Theory of operation, diagnosis, maintenance, repair, and adjustment procedures pertaining to steering gears, steering linkages, wheels and tires, and suspensions.
Course fee

AUT 215 Automotive Management (3-0) 3 Hours
Automotive business organization, service department management, and human relations aspect of management in areas of employer-employee relationships, customer-employee relations, and interdepartmental relations.

AUT 271 Fuel Systems I (4-2) 5 Hours
This course provides the student with a thorough understanding of the principles of carburetion, exhaust systems, fuel delivery systems, emission control systems. It also introduces electronic engine control systems..
Course fee

AUT 272 Fuel Systems II (4-2) 5 Hours
This course emphasizes the comprehensive diagnosis, testing, and service of fuel injection systems, including electronic engine control sensors and actuators and emission controls. Includes the basic operation of OBD-II (On Board Diagnostics).
Prerequisite: AUT 271
Course fee

AUT 273 Transmissions I (4-2) 5 Hours
This course focuses on the repair and overhaul of manual transmissions, transaxles and drive line components. Theory of operation, diagnosis, maintenance, and repair procedures pertaining to manual transmissions, transaxle and drive line components are covered.
Course fee

AUT 274 Transmissions II (4-2) 5 Hours
This course focuses on the repair and overhaul of automatic transmissions. Theory of operation, diagnosis, maintenance, and repair procedures pertaining to automatic transmissions, automatic transaxles, and torque converters are covered.
Course fee

AUT 275 Air Conditioning and Heating (4-2) 5 Hours
This course gives the beginning automotive technician the opportunity to gain an understanding of the theory of automotive air conditioning, heating and ventilation systems and the related service procedures. Students may also gain certification in recycling and recovery of refrigerants.
Course fee

AUT 276 Engine Systems Diagnosis (4-2) 5 Hours
This course gives the automotive technician the opportunity to review and enhance their theory and service skills in automotive electrical systems, fuel systems, engine mechanical diagnosis, emission control systems, and electronic engine control systems. Students will work with engine analyzers and hand held test equipment common to the automotive service industry.
Prerequisite: AUT 173
Corequisite: AUT 272
Course fee

AUT 277 Advanced Specialization (2-7) 5 Hours
This course gives the student the opportunity to practice operations in a shop environment and situation similar to the repair industry.
Prerequisite/Corequisite: 20 credits in AUT courses
Course fee

BIOLOGY (BIO)

Biological & Health Sciences Division,
Room C140, (847) 543-2042

BIO 111 Human Form and Function (3-0) 3 Hours
This course is intended to provide students with a preliminary, non-transfer level introduction to human anatomy and physiology. It is designed to prepare students requiring only a technical level of familiarity with human anatomy the background required for fields such as surgical technology.
Prerequisite: Language Proficiency

BIO 120 Environmental Biology (3-2) 4 Hours
Studies the relationships between humans and the environment. Topics include ecology, population biology, modification of our environment, resource use, land use planning, pollution, and energy. The goal is to better understand the biological and social problems that human use and misuse of the environment cause.
NOTE: Local field trips during scheduled lab periods. Students are responsible for their own transportation to and from the field sites. Recommended for non-science majors who need a one-semester lab science course.
Prerequisite: Language and Math Proficiency
Course fee
IAI: L1 905L

BIO 121 General Biology I (3-2) 4 Hours
Introduces basic biological principles of life processes held in common by all organisms. Includes the chemical and physical basis of life, cell structure and function, concepts of heredity, population genetics, and evolution.
NOTE: Intended for science majors and allied health students. Knowledge of chemistry is helpful.
Prerequisite: Language and Math Proficiency
Course fee
IAI: L1 900L

BIO 122 General Biology II (3-2) 4 Hours
Examines embryology, evolution, molecular genetics, animal behavior, and ecology. Includes experimental and computer laboratory exercises.
Prerequisite: BIO 121 (C or better)
Course fee

BIO 124 Anatomy and Physiology (3-4) 5 Hours
Introduces the structure and function of the human body. All of the major body systems (skeletal, muscular, nervous, endocrine, etc.) are covered. Human skeletons, human models, and pre-dissected cats are used in labs as representatives of human anatomy. Physiology exercises such as EKG (ECG), muscle contraction, and urinalysis will be performed.
NOTE: Recommended for allied health students.
Prerequisite: BIO 121 (C or better)
Course fee

BIO 125 Introduction to Microbiology (2-4) 4 Hours
Studies microorganisms with an emphasis on the bacterial groups. Morphology, principle activities and properties of bacteria, yeasts, molds, viruses, selected algae, and protozoans will be discussed. The role of microorganisms in natural systems, infection, immunity, foods, and industry will be covered. Laboratory techniques in handling, culturing, and identifying microorganisms will be emphasized.
Prerequisite: BIO 121 (C or better)
Course fee

BIO 126 Local Flora (2-2) 3 Hours
Introduces lab and field identification of plants of northeastern Illinois. Students use taxonomic keys and make useful collections of plants from various habitats.
Prerequisite: Language and Math Proficiency
Course fee

BIO 127 Introduction to Evolution (3-0) 3 Hours
Examines the concept of evolution and mechanisms by which evolution proceeds. Includes an analysis of the evidence for evolution, a section on basic genetics, and a brief treatment of challenges to evolution.
NOTE: Primarily for non-science majors.
Prerequisite: Language and Math Proficiency
Course fee
IAI: L1 907

BIO 128 Natural History of Selected Areas (2-2) 3 Hours
Examines a geographical area selected for its unique biological communities. Considers organisms and ecological relationships, emphasizing the effects of human activity.
NOTE: Taught as a field course that may include camping, backpacking, and/or canoeing. Travel expenses are paid by the student. Should be considered a general education elective; will NOT meet CLC laboratory science requirement.
May be taken twice, but any topic only once

BIO 211 Laboratory Techniques for the Bio-Technician (2-6) 5 Hours
Applies laboratory procedures concerned with preparation and separation of materials, analysis of experiments, identification of biological materials, and lab instrumentation. Presents some of the more sophisticated lab procedures used by local industry. Includes application of computers to biological phenomena.
Course fee

BIO 221 General Zoology (2-4) 4 Hours
Covers the structure, function, natural history, and phylogeny of animals. Basic principles of evolution, origins and content of major phyla, and vertebrate phylogeny are included. Emphasis is on the evolution of the vertebrates.
Prerequisite: BIO 121 (C or better)
Course fee
Offered spring only.

BIO 222 General Botany (2-4) 4 Hours
A comparative study of plant life from algae and fungi through the flowering plants. Morphology, ecology, and evolution will be stressed with some identification and collection of local flora.
Prerequisite: BIO 120, BIO 121, or HRT 111 (C or better in any one)
Course fee
Offered fall only.

BIO 224 Human Heredity and Evolution (3-2) 4 Hours
Topics include cell structure and function, the nature of the gene, Mendelian genetics, hereditary disorders, genetic counseling, evolution, eugenics, and genetic manipulation.
NOTE: Recommended for non-science majors.
Prerequisite: Language and Math Proficiency
Course fee

BIO 225 Environmental Problems (2-4) 4 Hours
Continues the study of ecology and current environmental problems introduced in BIO 120. Topics include hazardous wastes and chemicals, species extinction and management, and pollution of Lake Michigan. The emphasis in lab will be to study various types of pollution and ecological processes.
NOTE: Recommended for non-science majors.
Prerequisite: BIO 120 (C or better)
Course fee

BIO 226 Field Biology (2-2) 3 Hours
Studies plant and animal communities in various biomes. Topics include life histories and interdependence of organisms within the communities, and collection, identification, and preservation of specimens.
NOTE: Includes camping, backpacking, and/or canoeing. Travel expenses are paid by the student. Should be considered a general education elective; will NOT meet CLC laboratory science requirement.
May be taken twice, but any topic only once

BUILDING CONSTRUCTION TECHNOLOGY (BCT)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

BCT 111 Construction Layout (2-3) 3 Hours
Theory, principles and techniques of construction layout. Includes field procedures in fundamental surveying as well as site, foundation and frame layout.
NOTE: MTH 115, MTH 117 or equivalent is recommended.
Prerequisite: Language and Math Proficiency
Course fee
Offered summer only.

BCT 112 Construction Blueprint Reading (3-0) 3 Hours
Designed to provide the learner with an understanding of the fundamental principles of building construction. Emphasis is placed on the development of skills in reading and interpreting construction working drawings.
NOTE: Students enrolled in BCT program should take this course first semester.
Prerequisite: Math Proficiency

BCT 113 Construction Materials (3-0) 3 Hours
An overview and analysis of the properties, application, and testing methods of conventional construction materials. Emphasis is placed on the structural materials: wood, concrete, masonry and steel.
Prerequisite: Language and Math Proficiency
Offered fall only.

BCT 114 Materials Testing (1-3) 2 Hours
Testing of materials used in various fields of construction. Principle means of performing destructive and nondestructive tests are shown, then performed; results are analyzed.
Prerequisite: MTH 117
Course fee

BCT 117 Construction Methods (3-0) 3 Hours
An overview and analysis of conventional construction methods. The application of building materials in various construction systems is emphasized.
NOTE: BCT 113 or equivalent construction experience is recommended.
Prerequisite: Language and Math Proficiency
Offered spring only.

BCT 118 Mechanical and Electrical Equipment (3-0) 3 Hours
The equipment and materials used in the electrical, mechanical and environmental systems of buildings.
NOTE: BCT 112 or equivalent construction experience is recommended.
Prerequisite: MTH 117
Offered spring only.

BCT 119 Specifications and Building Codes (3-0) 3 Hours
Construction specifications and how they relate to national, state, and local building codes. Topics related to job safety and OSHA regulations will also be discussed.
NOTE: BCT 112 or equivalent construction experience is recommended.
Prerequisite: Language and Math Proficiency
Offered spring only.

BCT 211 Job Scheduling and Control (3-0) 3 Hours
Provides the learner with fundamental knowledge and skill in job planning and scheduling. Student participants will be involved in all phases of planning and scheduling from the simple process of listing and sequencing to the development of the more complicated critical path network.
NOTE: BCT 112 or equivalent construction experience is recommended.
Prerequisite: Language and Math Proficiency
Offered spring only.

BCT 212 Principles of Heavy Construction (3-0) 3 Hours
Various principles and practices employed in heavy construction. Equipment and materials necessary for a particular construction technique are emphasized.
NOTE: Satisfies CIV 112 course requirement.
Prerequisite: Language and Math Proficiency
Offered fall only.
Offered odd years only.

BCT 213 Construction Law and Documents (3-0) 3 Hours
The legal aspects of construction law and contract documents. State and federal construction related documents are also discussed.
NOTE: BCT 112 or equivalent construction experience is recommended.
Prerequisite: Language and Math Proficiency
Offered fall only.

BCT 214 Construction Estimating (3-0) 3 Hours
The theory, principles and techniques of construction material, quantity analysis (take-off). The analysis of labor, overhead and profit is also introduced.
NOTE: BCT 112 or equivalent construction experience is recommended.
Prerequisite: Language and Math Proficiency
Offered fall only.

BCT 215 Construction Management (3-0) 3 Hours
Basic construction management tools and their application. The importance of positive relationships between office and field activities is stressed.
NOTE: BCT 211 or equivalent construction experience is recommended.
Prerequisite: Language and Math Proficiency
Offered spring only.

BUSINESS ADMINISTRATION (BUS)

Business Division, Room A143, (847) 543-2041

NOTE: Topics will be identified for each section of the course; prerequisite depends upon the selected topic.
May be taken four times for credit toward degree

BUS 111 Fundamentals of Finance (3-0) 3 Hours
Study of basic methods and quantitative tools of Business Finance. Short and long term investment decision making for businesses and individuals.
Prerequisite: ACC 112 or ACC 121

BUS 113 Human Resource Management (3-0) 3 Hours
Personnel functions, wage systems, incentives, fringe benefits, cost budgeting, policy implementation, leadership styles, and disciplinary procedures.
Prerequisite: Language Proficiency

BUS 114 Training Principles and Practices (3-0) 3 Hours
This course identifies the principles and methods of training with specific applications for training in supervisory skills and equipment utilization. Training equipment, training materials and services, and managing the training function will be covered. Additionally, students will develop training skills in selected field of training.
Prerequisite: BUS 113 or BUS 121

BUS 115 Elements of Supervision (3-0) 3 Hours
Introduction to responsibility of supervisor in industry, including organizational duties, grievances, human relations, training, rating, promotion, quality-quantity control, and management-employee relations.

BUS 116 Principles of Quality Management (3-0) 3 Hours
A survey of the principles and processes of Total Quality Management as applied to industrial, service and governmental organizations. The evolution of TQM and related management approaches will be examined along with team building skills, quality standards, quality audits, and organization design.
Prerequisite: Language Proficiency

BUS 118 Principles of Insurance (3-0) 3 Hours
This course provides the basic principles of insurance. A description of the nature and operation of the insurance industry along with an understanding of risk management enables students to work effectively either within or with the insurance industry. This course meets the preparation requirements for the Insurance Institute of America's Program in General Insurance INS 21 national exam.
Prerequisite: Language Proficiency

BUS 121 Introduction to Business (3-0) 3 Hours
Broad understanding of principles, policies, problems, and functions of business. Business - its nature and opportunities, ownership, organization, management, marketing, physical factors, personnel, finance, managerial controls, law, regulated industries, and taxation.
Prerequisite: Language Proficiency

BUS 122 Principles of Marketing (3-0) 3 Hours
Introduction to marketing fundamentals, nature of competition, basic marketing problems, policies of business enterprises, and marketing operation planning.
NOTE: Prior or concurrent enrollment in BUS 121 is strongly recommended.
Prerequisite: Language and Math Proficiency

BUS 211 Practicum in Mid-Management (0-15) 3 Hours
This course is for students pursuing a 2-year degree in Business Management. It is available to sophomore students and provides a "capstone" course offering specialized training in a specific career area. The content will be based primarily on individual needs.
Prerequisite: Sophomore Standing

BUS 212 Business to Business Marketing (3-0) 3 Hours
Management problems and policies in marketing various categories of goods and services to organizations and businesses that are used directly in their own operations. Included in the topics are analyses of factors in the development of the marketing mix as it applies to business customers and markets different and distinct from consumer goods.
Prerequisite: BUS 121 or BUS 122

BUS 213 Principles of Salesmanship (3-0) 3 Hours
Develops persuasive communication skills used in personal selling. Industrial, retail, service related areas covered: product and consumer knowledge, prospecting, follow-up, time management, and sales force management.
NOTE: Prior enrollment in PSY 121 or PSY 122 recommended.
Prerequisite: BUS 121

BUS 214 Advertising (3-0) 3 Hours
This course provides an understanding of advertising in the promotional mix of the business firm. Principles and practices of promotional research, media selection, copyrighting, layout, budgeting and the legal aspects of advertising and promotion will be covered. Students will develop an advertising campaign for a single product, service or small business.
Prerequisite: BUS 121

BUS 215 Production and Inventory Control (3-0) 3 Hours
This course explores the design of production control, quality control and inventory control system. These systems will be related to the functioning of the enterprise as a whole. Mathematics proficiency required.
Prerequisite: AOS 112 or BSS 112 or MTH 108 or MTH 121 or MTH 141

BUS 219 Small Business Management (3-0) 3 Hours
This course deals with the role of small business in our society, the problems and opportunities connected with starting a new venture, and the management skills required to successfully operate the on-going business. Intended to meet the needs of those now managing a small business, those considering the possibilities of entrepreneurship and those who wish to learn more about how small businesses operate.
Prerequisite: BUS 121 or approval of dean

BUS 221 Business Law I (3-0) 3 Hours
This course introduces principles of American law governing business and personal transactions. Areas covered include contracts and agency. The course also introduces the American legal environment: the court system, administrative agency procedures, and government regulation in the area of antitrust, employment and consumer transactions.
Prerequisite: BUS 121

BUS 222 Business Law II (3-0) 3 Hours
Continues study of Business Law. Areas covered include sales, leases, secured transactions, partnership, corporations, and commercial paper. Common law principles as well as statutory and administrative agency rules are discussed as appropriate.
Prerequisite: BUS 221

BUS 223 Principles of Management (3-0) 3 Hours
The functions, skills, and roles played by managers in a variety of organizations. Emphasis on planning, organizing, leading, and controlling to reach desired objectives.
Prerequisite: BUS 121

BUS 224 Principles of Retailing (3-0) 3 Hours
Survey of retail institutions, consideration of store location and organizational procedures; buying and merchandising practices, promotional and personnel policies.
Prerequisite: Bus 121 or approval of dean

BUS 270 Introduction to International Business (3-0) 3 Hours
This course provides an overview of the field of international business, with an emphasis on international marketing and corresponding instruction in international finance, cultural diversity, economic systems and political environments. The course deals in depth with specific countries and explores methods of doing business in each.
Prerequisite: BUS 121

BUS 299 Selected Topics in Business (Variable) 1-3 Hours
This course is designed to provide students with more information about specialized areas of business. These areas may be current issues that are of a career or management development nature..
NOTE: Topics will be identified for each section of the course; prerequisite depends upon the selected topic.
May be taken four times for credit toward degree

CHEMISTRY (CHM)

Biological & Health Sciences Division,
Room C140, (847) 543-2042

CHM 120 Chemical Concepts (3-2) 4 Hours
A survey course that includes the fundamentals of chemical composition, chemical calculations, solutions, states of matter, the periodic table, acids, bases and pH, radioactivity and nuclear processes, and a brief overview of organic and biochemistry.
NOTE: Recommended for non-science majors.
Prerequisites: MTH 102 (C or better) or an appropriate score on the Chemistry Placement Test - AND - Language Proficiency
Course fee
IAI: P1 902L

CHM 121 General Chemistry I (3-4) 5 Hours
Designed to develop an analytical approach to physical problems. Provides the student with a basic understanding of the underlying principles of structure, energy, and reactivity and introduces the student to the topics of stoichiometry, gas laws, thermochemistry, atomic structure, periodicity, molecular geometry, and states of matter.
Prerequisites: MTH 108 (C or better) or an appropriate score on the Chemistry Placement Test - AND - Language Proficiency.
Course fee
IAI: P1 902L

CHM 123 General Chemistry II (3-4) 5 Hours
Presents some of the topics presented in CHM 121 in more detail. Introduces the topics of solutions, equilibria, kinetics, acids and bases, solubility, thermodynamics, and electrochemistry. Includes introductory work in qualitative analysis.
Prerequisite: CHM 121 (C or better)
Course fee

CHM 125 Elementary Organic Chemistry (3-4) 5 Hours
Survey of organic chemistry. Provides a basic understanding of nomenclature, structure, stereochemistry, and reactivity. Introduces spectroscopy and biochemistry.
Prerequisite: CHM 121 (C or better)
Course fee

CHM 221 Analytical Chemistry (3-4) 5 Hours
Introduces the fundamental concepts associated with gravimetric, volumetric, and instrumental methods of analysis. Lab time is divided evenly between traditional quantitative analysis and modern instrumental analysis.
Prerequisite: CHM 123 (C or better)
Course fee

CHM 222 Organic Chemistry I (3-4) 5 Hours
Provides an understanding of the theoretical concepts and experimental techniques related to the chemistry of carbon compounds. Topics include an overview of nomenclature, acid-base systems, all classes of saturated and unsaturated hydrocarbons, alkyl halides, stereochemistry, and major substitution, addition, and elimination reaction mechanisms. Covers basic laboratory techniques involving separation, identification, and synthesis of organic compounds.
Prerequisite: CHM 123 (C or better)
Course fee

CHM 223 Organic Chemistry II (3-4) 5 Hours
Presents fundamental principles of organic chemistry stressing the preparation, reactions, mechanisms, and structure of organic compounds. Topics include spectroscopy, functional groups, carbanion condensation, reactions, and polymers. Introduces concepts of carbohydrates, lipids, and proteins.
Prerequisite: CHM 222 (C or better)
Course fee

CHM 224 Biochemistry (3-0) 3 Hours
Provides an understanding of the basic principles, concepts, terminology, and laboratory techniques of biochemistry. Covers cell structure, types of biochemical compounds, nomenclature, reaction pathways, information and energy systems, and isolation and identification techniques.
Prerequisite: CHM 125 or CHM 223 (C or better in either)

CHINESE (CHI)

Communication Arts, Humanities &
Fine Arts Division, Room B237, (847) 543-2040

CHI 121 Beginning Chinese I (4-0) 4 Hours
This course is the first semester of a one year introduction to Mandarin Chinese, the official standard language of Mainland China and Taiwan. Emphasis will be on developing basic listening, speaking, reading and writing skills within the context of the modern Chinese culture.

CHI 122 Beginning Chinese II (4-0) 4 Hours
This course is the second semester of a one year introduction to Mandarin Chinese, the official standard language of Mainland China and Taiwan. Listening, speaking, reading and writing skills will be further developed within the context of Chinese culture.
Prerequisite: CHI 121

CHI 221 Intermediate Chinese I (4-0) 4 Hours
This course is the first semester of one year of continuing study for beginning Chinese learners who have studied Book I and II, Elementary Chinese Reader, or have equivalent mastery of the Chinese language. Grammar and character writing review with continuation of development of listening, speaking, reading, and writing skills.
Prerequisite: CHI 122

CHI 222 Intermediate Chinese II (4-0) 4 Hours
This course is the second semester of one year of continuing study for beginning Chinese learners who have studied Book I, II, and III, Elementary Chinese Reader, or have equivalent mastery of the Chinese language. Grammar and character writing review with continuation of development of listening, speaking, reading and writing skills.
Prerequisite: CHI 221
IAI: H1 900

CISCO NETWORKING (CNA)

Business Division, Room A143, (847) 543-2041

CNA 111 Cisco Networking I (2-2) 3 Hours
This is a first course in the Cisco Networking Academy sequence of four courses. This course will introduce networking and general network concepts and build the fundamental laboratory skills in wiring and testing. The course will introduce the seven layers of OSI model and the concepts involved with routing and routing protocols. Delivery is via Internet from the Cisco servers and supplementary lecture. Assessment for the on-line material is via the Internet on the Cisco servers. Laboratories and some assessment are done in class as well as the delivery of supplemental material. The student is expected to spend 8-10 hours a week outside of class with the online material outside of scheduled class time.
Course fee

CNA 112 Cisco Networking II (2-2) 3 Hours
This is the second Cisco Networking Academy course and will extend the OSI layer concepts. The course will concentrate on routing and will deal with routers, routing and router configuration using IOS to program routers. Routers will be physically configured within networks and programmed during laboratories. IOS, TCP/IP and IP addressing will be studied. The course is partially online and the student will be expected to spend 8-10 hours a week with the online material outside of scheduled class time.
Prerequisite: CNA 111
Course fee

CNA 113 Cisco Networking III (2-2) 3 Hours
This is the third course in the Cisco Networking Academy program. The course will concentrate on networking switching and more advanced routing concepts. The course will use the Cisco online materials outside of the scheduled class time but all assessments will be done during scheduled classes. Lectures over selected subjects and laboratories will be done during class time and the threaded case study will be complete for a single building. Engineering journals will be kept along with other reference materials. The class is partially online and the student will be expected to spend 8-10 hours a week outside of scheduled class time with the online material.
Prerequisite: CNA 112
Course fee

CNA 114 Cisco Networking IV (2-2) 3 Hours
This is the fourth and final semester of the Cisco Networking Academy program (CCNA). This semester will deal with Wide Area Networks (WANS) and the protocols and services used in constructing WANS. Point to Point protocols will be studied as well as ISDN. Fram relay will be investigated as applied to network routing and laboratories will be done where applicable. The Threaded case study will be completed and presented. The student will be expected to spend 8-10 hours a week outside of scheduled class times for online material and the case study.
Prerequisite: CNA 113
Course fee

CIVIL TECHNOLOGY (CIV)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

CIV 111 Surveying I (3-2) 3 Hours
Introductory course in principles, field practice and basic calculations for boundary, topographic mapping, and engineering surveying. General use and care of steel tapes, laser and conventional levels, transits and total station will be covered.
NOTE: MTH 115 or MTH 117 or equivalent is recommended.
Course fee
Offered fall only.

CIV 112 Heavy Construction Methods (3-0) 3 Hours
Examination of methods, materials and equipment used on large engineering and public works construction projects. Satisfies BCT 212 course requirements.
Offered fall only.
Offered even years only.

CIV 113 Construction Inspection (3-0) 3 Hours
Introduces students to the principles of construction inspection including safety practices, legal aspects, and applicable specifications, codes and standards. Laboratory tests for concrete quality control will be demonstrated. The duties of both a project inspector and a building inspector (building official) are discussed.
Offered fall only.

CIV 211 Surveying II (2-3) 3 Hours
Continuation of Surveying I, dealing with horizontal and vertical curves for highways, traverse adjustments and area computations, boundary and public land surveys, determination of meridian, coordinate geometry and calculations, Global Positioning Systems (GPS), data collection with total stations, and state plane coordinates.
Prerequisite: CIV 111
Course fee
Offered spring only.

CIV 212 Sanitation Systems (4-0) 4 Hours
Study of methods, equipment, and quality control tests used in water supply and treatment and disposal of sewage including individual as well as public systems.
NOTE: Completion of MTH 117 is strongly recommended.
Offered spring only.
Offered odd years only.

CIV 213 Subdivision Planning and Design (2-3) 3 Hours
Subdivision planning criteria, geometry of curvature and elevation of local streets, basic storm sewer design, and fundamentals of sanitary sewer and watermain design are included in the course. Emphasis is placed on the design process starting from field notes through preparation of construction drawings and material take-off list.
NOTE: MTH 115, EGR 121 and CAD 117 or equivalent are recommended.
Course fee
Offered spring only.
Offered even years only.

CIV 214 Soils and Foundations (2-2) 3 Hours
Investigation of soil properties, basic geology, design of foundations, and laboratory tests used to determine soil characteristics
NOTE: Completion of MTH 117 is strongly recommended.
Course fee
Offered spring only.

CIV 215 Special Problems (2-3) 3 Hours
Problems of individual interest in civil technology. Advanced study in one or more technical areas such as highway design, pollution control, and surveying may be approved.
NOTE: Student must furnish basic required equipment.
Prerequisite: Language and Math Proficiency

COLLEGE STUDY SKILLS (CSS)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

CSS courses do not apply to any associate degree or career certificate.

CSS 101 College Study Skills (0-2) 1 Hour
College Study Skills is a module for students who want to improve their learning strategies in a non-traditional and flexible learning environment. This course is designed to help students learn time management, listening, notetaking, textbook reading, memory improvement, and test-taking skills. Instruction is self-paced and self-scheduled, and utilizes a workbook. Students are tested on concepts from each unit in the testing center. Students may enroll after the beginning of the semester and may complete at any point during the year.
May be taken four times for credit

CSS 102 Basic Skills of Reading and Writing (3-0) 3 Hours
CSS 102 will provide students with intensive practice in reading, writing and thinking skills. The course will concentrate on the ability to read and write sentences and paragraphs, to recognize basic word lists and content area vocabulary, and to develop a positive self concept.
May be taken four times for credit

CSS 103 Developmental Skills of Reading and Writing (3-0) 3 Hours
CSS 103 will provide students with continued intensive practice in basic reading, writing and thinking skills. This course will concentrate on reading and writing paragraphs, expanding content specific vocabulary, improving self-concept and strengthening thinking skills and improving self- concepts.
Prerequisite: CSS 102
May be taken four times for credit

COMPUTER AIDED DESIGN (CAD)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

CAD 110 CAD/CAM Concepts (2-2) 3 Hours
An introductory level course designed to provide the student with an understanding of the role of computers in design and manufacturing. The basics of computer components and operation and DOS/Windows will be covered as well as an introduction to AutoCAD Windows.
NOTE: This course should be taken prior to any other CAD courses if the student lacks an understanding of the computer and/or DOS.
Course fee

CAD 117 Introduction to AutoCAD (2-2) 3 Hours
The course is designed to introduce students to the use of AutoCADr for computer-aided design and drafting. 2D drawing, modifying and dimensioning is emphasized.
NOTE: DFT 111 or EGR 121 or ARC 121 or equivalent drafting experience and CAD 110 or DPR 190 are recommended.
Course fee

CAD 119 Introduction to Microstation (2-2) 3 Hours
The course will introduce the students to the Microstation CAD system, a PC version of the popular Microstation CAD software. Topics include two and three dimensional modeling, drawing on various levels, dimensioning and related topics.
NOTE: Completion of ARC 121 or EGR or DFT 111 and CAD 110 or DPR 190 or equivalent industrial experience are recommended.
Course fee

CAD 175 AutoCAD 3D (2-2) 3 Hours
Presents topics and lab work dealing with 3D wireframe, surfacing and solid modeling using AutoCAD and Mechanical Desktop software.
Prerequisite: CAD 117
Course fee

CAD 176 Introduction to Pro-Engineer (2-2) 3 Hours
Designed as an introduction to the PRO-Engineer Computer Aided Design software. Topics will range from 3-dimensional solid modeling to detail drawing creation and assembly.
NOTE: Completion of CAD 117 or CAD 119 or equivalent industrial experience is recommended.
Course fee

CAD 177 Site Planning and Drafting (2-2) 3 Hours
This course will introduce the design and drafting requirements of site planning for construction projects. The course will include elements of surveying, drainage, utility requirements, land use, and landscape design.
Prerequisites: CAD 117 or CAD 119, and Language and Math Proficiency
Course fee
Offered fall only.
Offered odd years only.

CAD 179 CAD Animation and Rendering (2-2) 3 Hours
Animation and rendering of 3 dimensional objects for architects, graphic illustrators and product designers. Software emphasized is 3D Studio Max.
NOTE: Completion of CAD 117, or CAD 119, or CAD 176, or equivalent industrial experience is recommended..
Prerequisite: Language and Math Proficiency
Course fee

CAD 211 Mechanical Detailing (2-2) 3 Hours
This course will help students interested in CAD to advance their knowledge and skills of mechanical drafting operations utilizing an industrial CAD/CAM system.
Prerequisite: CAD 175 or CAD 176
Course fee

CAD 214 Architectural Applications (2-2) 3 Hours
Design and drawing of buildings including furniture, fixtures, windows, doors, foundation plans, floor plans, roof plans, site plans, elevations, sections, and dimensioning, in 2D and 3D using AutoCAD or other third-party architectural software.
NOTE: Contact program coordinator for possible substitution of industrial experience for the prerequisite.
Prerequisites: ARC 121 or ARC 170 or ARC 171 -AND- CAD 117
Course fee

CAD 217 AutoCAD II (2-2) 3 Hours
Discussion and lab work are presented dealing with advanced drawing and dimensioning techniques, attributes, and individualized customization of AutoCAD menus and files.
Prerequisite: CAD 117
Course fee
Offered spring and summer only

CAD 219 Introduction to AutoLISP (2-2) 3 Hours
This introductory AutoLISP course for experienced AutoCAD users covers the interactive programming language used to automate complex and lengthy tasks within AutoCAD. Students enrolling in this course should have a high degree of proficiency with both the DOS operating system and the 2D and 3D capabilities of the AutoCAD software.
Prerequisite: CAD 217
Course fee
Offered spring only.
Offered odd years only.

CAD 273 Advanced CAD Specialization (Variable) 1-3 Hours
The course is of a project nature where the student will select and complete one or more projects throughout the semester. There will be periodic reports to the instructor in the form of a formal written progress report. Specific prerequisite will be determined by the instructor.
Course fee

CAD 276 Pro-Engineer II (2-2) 3 Hours
The course is designed as a continuation of CAD 176. It expands the topics started in Introduction to Pro-Engineer. It covers advanced assemblies and part creation and an introduction to Mechanica.
Prerequisite: CAD 176
Course fee

CAD 279 Animation and Rendering II (2-2) 3 Hours
Designed as a continuation of CAD 179, Animation and Rendering, and includes NURBS, advanced modeling and modifiers, advanced materials, special effects, animation controllers, kinematics, MAX scripting, architectural applications, scene output.
Prerequisite: CAD 179
Course fee

COMPUTER INFORMATION SYSTEMS (CIS)

Business Division, Room A143, (847) 543-2041

CIS 110 Programming Concepts Using Visual Basic (3-0) 3 Hours
Introduces elementary Visual Basic language syntax, control structures, forms and the visual programming paradigm. The major focus will be on programming concepts and techniques. Time will be spent on VB String manipulation in addition to other basic data types and array manipulation. Students will code proper Sub and Function procedures. This course is a CIS core prerequisite and is required before Introduction to Visual Basic Programming. SOFTWARE: The students can use any recent VB compiler to develop the course projects. The lab will use a recent Microsoft VB compiler.
Corequisite: CIS 120 or passing score on the Introduction to Computers Placement Test
Course fee

CIS 111 Comprehensive Spreadsheets (3-0) 3 Hours
Covers the advanced features of spreadsheet use and design. File building techniques, the creation of high-quality graphics, database features including query and table handling are also covered. Use of financial, date, and time functions will be included. Use of macros will cover automating operations, building and customizing spreadsheets with interactive macros, and improving macro performance including Visual Basic macros. Projects will require a substantial amount of time using a computer outside of class.
Prerequisite: CIS 120 or CIS 119 or AOS 112 or BSS 112 or passing score on the Introduction to Computers Placement Test
Course fee

CIS 112 Introduction to Local Area Networking (3-0) 3 Hours
An introductory course designed to provide a practical and comprehensive working knowledge of Data Communications and Local Area Networks. The course includes key data communication and LAN concepts. Included will be typical LAN business applications, topologies, standards, and protocols, as well as network operating systems, servers, LAN and LAN connectivity, LAN cables, and network management.
Prerequisite: CIS 120 or passing score on the Introduction to Computers Placement Test

CIS 113 Programming Concepts Using Java (3-0) 3 Hours
Provides first-time or novice programmers an excellent choice for learning programming using the Java programming language. This course helps students understand the significance of the Java programming language. With this knowledge, students will develop programming skills in the areas of object oriented and Java technology. Students will be able to create simple programs in both Internet and standalone environments. Much of the effort will involve coding and reading Java syntax. College algebra and Internet experience prior to enrollment would be helpful. SOFTWARE: MS-Windows and a recent version of a Java compiler.
Corequisite: CIS 120 or passing score on the Introduction to Computers Placement Test
Course fee

CIS 115 PC Operating Systems (3-0) 3 Hours
Covers the essential elements and differences of the major PC operating systems in use today. Specific features along with general concepts of each operating system will be addressed. System optimization, memory management, installation, and software/hardware management will be an integral part of this course.
NOTE: Previous PC computer experience or introductory course recommended.
Prerequisite: Language and Math Proficiency

CIS 119 Introduction to Office Software (2-2) 3 Hours
A hands-on course for students who simply need to learn basic office software such as word processing, spreadsheets, databases and how to create presentations for speeches. This course is not for CIS majors and this course does not apply to CIS degrees or certificates. SOFTWARE: WORD 2000, EXCEL 2000, POWERPOINT 2000, ACCESS 2000
Prerequisite: Language and Math Proficiency
Course fee

CIS 120 Introduction to Computers (3-0) 3 Hours
This course is designed to explain the significance and role of the computer in society and in business. Students will learn introductory concepts of computer hardware, operating systems, software, operations, and electronic research and communication (INTERNET). Personal computer hands-on experience using a popular integrated software package will provide students a basis for understanding the data processing profession and offer useful microcomputer skills for accomplishing their future course-work.
IAI BUS 902
Prerequisite: Language and Math Proficiency
Course fee

CIS 170 Internet Programming for Business (3-0) 3 Hours
This course is designed as an introduction to learning the web's language. The main objective of the course is to develop the code necessary to create and maintain Internet pages for business. Students will learn the fundamentals of programming using the Internet/Web Markup languages and Scripting languages. Students will gain an understanding of fundamental programming concepts.
Prerequisite: CIS 120 or CIS 119 or AOS 112 or BSS 112 or passing score on the Introduction to Computers Placement Test
Course fee

CIS 171 JavaScript/JScript (3-0) 3 Hours
This course addresses advanced topics of scripting languages that will allow the student to write the code necessary to create, manipulate and use various variables, objects, properties, methods, events, and functions. Students will create several projects that will involve client-side and server-side programming techniques and styles. Debugging techniques will be covered extensively.
Prerequisite: CIS 170
Course fee

CIS 210 Introduction to Visual Basic Programming (3-0) 3 Hours
Extends the Visual Basic language beyond syntax as forms into the realm of object-oriented programming and all of the visual tools that are an important part of the Microsoft Windows environment. Students will create Graphical User Interfaces (GUI) by building forms, adding controls and setting properties for buttons, check boxes, dialog boxes and other Visual Basic controls. Design ideas for menus and the use of graphics, color and layout will be explored. A number of simple application examples will be studied, redesigned and reprogrammed to fully explore Visual Basic coding techniques and gain debugging experience, in addition to developing original applications. SOFTWARE: The students can use any recent VB compiler to develop the course projects. The lab will use a recent Microsoft VB compiler.
Prerequisite: CIS 110 or CIS 113 or a CIS programming course or a passing score on the Programming Placement Test
Course fee

CIS 211 Introduction to C Programming (3-0) 3 Hours
This course is an introduction to the fundamentals of the "C" programming language. Emphasis is on the design, coding, and debugging of "C" programs in an interactive micro-computer environment. The course will include the creation of complex data formats, program input and output, and the saving of information files. Structured programming techniques and "C" language style conventions will be emphasized.
Prerequisite: CIS 110 or CIS 113 or a CIS programming course or a passing score on the Programming Placement Test
Course fee

CIS 212 Objects and ActiveX Using Visual Basic (3-0) 3 Hours
Provides students that already have an understanding of Visual Basic controls and forms knowledge of Visual Basic's use of objects and ActiveX. It introduces the concept of classes and objects and shows how they implement Object Oriented Programming using Visual Basic. This will include the basic concepts of encapsulation, polymorphism and inheritance. The student will learn about interfaces that provide a mechanism for implementing inheritance in Visual Basic. The concepts of Microsoft's Component Object Model are introduced. The student will learn how to implement ActiveX components, controls and documents. Collections and dictionaries are introduced. Object Oriented Design will be discussed and then used to implement a business application. This business application will discuss the use of business objects and utility objects. SOFTWARE: MS-Windows and the Visual Basic Compiler.
Prerequisite: CIS 210
Course fee

CIS 213 Enterprise Database Access Using Visual Basic (3-0) 3 Hours
Provides students that already have an understanding of Visual Basic controls and forms knowledge of Visual Basic's use of enterprise databases. This course examines the various ways that Visual Basic provides for accessing data in databases and external files. This capability is critical in today's use of multi-tiered client/server architectures. It will explore the principles of databases and the use of the Structured Query Language (SQL) to provide access to the data. Data Access Objects, Remote Data Objects, ODBC, and ActiveX Data Objects will be used to provide higher level access to the database data. Different data grids, data controls and data bound controls will be used with the various access technologies provided by Visual Basic. The student will also learn how to set up an Internet database application. SOFTWARE: MS-Windows and the Visual Basic Compiler.
Prerequisite: CIS 212
Course fee

CIS 215 Object Oriented Programming using JAVA (3-0) 3 Hours
Encapsulation, inheritance and polymorphism, as implemented in the unique Java way, will be an important basis for study. Students will write Java programs for business applications and applets for the Internet. There will be special emphasis on C and C++ differences such as multithreading, graphics, multimedia, Java classes, and the larger Java environment. Basic GUI components from the Abstract Windowing Toolkit (AWT) and Java Foundation classes (Swing) will be covered. While some knowledge of the Internet is desirable, there is no need to know HTML. Software: Windows 95 and a recent version of a Java compiler.
Prerequisite: CIS 110 or CIS 113 or a CIS programming course or a passing score on the Programming Placement Test

CIS 216 Programming in C++ (3-0) 3 Hours
Extends the knowledge of programming by demonstrating how C++ implements the basic constructs of Object Oriented Programming (OOP). The student will start the course reviewing the basic program constructs but in terms of C and C++ statements. This will include C language stream I/O, struct and typedef, memory allocation and pointers and the enum statement. Encapsulation, inheritance and polymorphism, the three fundamental criteria for OOP, will be examined closely. Students will implement C++ programs organized as a cooperative collection of objects, each of which represents an instance of some class, and whose classes are all members of a hierarchy of classes united via different kinds of class relationships. This is not a visual programming course for Windows or other GUI. This course will form the basis for going into the Visual C++ course. SOFTWARE: The students can use any recent ANSI compatible C++ compiler to develop the course projects. The lab will use a recent Microsoft C++ compiler.
Prerequisite: CIS 110 or CIS 113 or a CIS programming course or a passing score on the Programming Placement Test
Course fee

CIS 217 Advanced C++ (3-0) 3 Hours
Extends the students knowledge of C++ through the study of the application of data structures and an introduction to frameworks. The student will learn the basic concepts and the application of the normal data structures of vectors, linked lists, stacks, queues, trees. These concepts will be examined through discussion on the implementation of these data structures in The Standard Template Library components. These studies will be based on C++ templates and C++ exception handling. The course will examine searching and sorting algorithms especially in relation to the data structures studied above. The course will also study the concepts and use of frameworks emphasizing the C++ Stream I/O classes and their relationships. With this knowledge, students will be able to apply appropriate data structures to solve programming problems. The student will understand the use of frameworks as a basis to solving a class of problems. SOFTWARE: MS-Windows and a recent C++ compiler with a supporting STL.
Prerequisite: CIS 216
Course fee

CIS 218 Programming in Visual C++ (3-0) 3 Hours
Extends the advanced features of the C++ language into the realm of visual programming techniques with major emphasis on the Microsoft Foundation Class. Students will delve into the Visual Workbench and Wizard basics, along with App Studio. The MF Classes will be studied to the extent that students can derive new classes using inheritance. GUI programs will also be developed that take advantage of the Help Facility and Visual C++'s capability to create the all-important DLL's for program distribution. OLE client application with VBX/OCX controls will be covered. Software: MS-Windows and a recent C++ compiler with a supporting STL.
Prerequisites: CIS 210 and CIS 211, or CIS 217
Course fee

CIS 230 Comprehensive Database (3-0) 3 Hours
Course teaches the PC user to implement a relational data base using Access. Concepts of a relational data base are discussed. The student learns to create and modify tables and prepare customized queries, forms and reports. Advanced concepts such as graphs, embedding pictures, and the use of simple macros are also covered.
Prerequisite: CIS 120 or CIS 119 or AOS 112 or BSS 112 or passing score on the Introduction to Computers Placement Test
Course fee

CIS 231 Managing Microcomputer Systems (3-0) 3 Hours
This course is designed to help the student evaluate the computing needs of a small business, select appropriate hardware and software, and provide for installation, backup, security, maintenance, evaluation, and micro/mainframe communication of the microcomputer system.
Prerequisite: CIS 120 or AOS 112 or BSS 112 or passing score on the Introduction to Computers Placement Test

CIS 232 Teleprocessing (3-0) 3 Hours
An introduction to telecommunications, information analysis, systems design, terminal equipment, data modems, common carrier facilities and communications processing equipment.
Prerequisite: CIS 112

CIS 233 Comprehensive Word Processing (3-0) 3 Hours
Covers the basic, advanced, and desktop publishing features of a word processor used in business. Students will learn to create, print, save, and use various writing tools with various types of documents. Advanced and specialized topics covered will include, but are not limited to, the creations of macros, columns, tables, using and creating templates, and mail merge. A major project will be required at the end of the semester. Projects will require 3-5 hours per week using a computer outside of class.
Prerequisite: CIS 120
Course fee

CIS 234 Visual Programming in Java (3-0) 3 Hours
Based on prior knowledge of the Java Swing controls, this course will focus on JavaBeans. Rapid Application Development(RAD) techniques in some current Java IDE will be developed. Most of the time will be spent designing and programming using JavaBeans emphasizing code reuse. The reflection and introspection features will form an important basis of this study. Students will customize several "Beans" of their own. Most of the Java Foundation Class will be investigated. Functionally, this course is similar to a course in Visual Basic or Visual C++ programming. SOFTWARE: MS-Windows and a recent version of a Java compiler such as in JBuilder.
Prerequisite: CIS 215
Course fee

CIS 235 Enterprise Java Development (3-0) 3 Hours
Takes JavaBeans to the higher level of an enterprise system for distributed systems across multiple platforms. Remote Method Invocation (RMI), JINI, servlets and security will be major topics. The Internationalization API will be investigated. Students will write n-tier applications and be able to program in the IDL language. Some time will be spent on CORBA and JDBC standards. XML for data transfer will also be studied. SOFTWARE: MS-Windows and a recent version of a Java IDE.
Prerequisite: CIS 234
Course fee

CIS 236 LAN Administration (3-0) 3 Hours
Course covers the basics of System Administration. Included is establishing and maintaining network users, directories and security. Monitor and administer the network through the use of file server utilities. Set up and manage network printing. Maintain a backup of all files, security, and rights.
Prerequisite: CIS 112
Course fee
May be taken twice, but any topic only once

CIS 250 Introduction to Cobol Programming (3-0) 3 Hours
The first course in the study of COBOL (Common Business Oriented Language) programming. The syntax of the language, as well as elementary programming logic, will be covered. Topics include simple repetitive processing, table processing with the use of subscripts and indexes, sorting, and multiple file processing.
Prerequisite: CIS 110 or CIS 113 or a CIS programming course or a passing score on the Programming Placement Test
Course fee

CIS 256 Comprehensive Cobol (3-0) 3 Hours
Continuation of CIS 250. Students write programs for table handling, creation and maintenance of disk files, and multiple file updates using VSAM. Emphasis is on efficient, concise coding. Includes the use of subprograms, dump reading, and IDCAMS.
Prerequisite: CIS 250
Course fee

CIS 258 Systems Analysis (3-0) 3 Hours
Concepts of the systems development cycle are presented. These include: systems approach to problem solving, systems analysis, initial systems design, technical design, user acceptance, systems conversion, and final evaluation. Business needs and the human aspects of EDP are stressed.
Prerequisite: CIS 110 or CIS 113 or a CIS programming course or a passing score on the Programming Placement Test

CIS 271 Microcomputer Assembler Language (3-0) 3 Hours
This course is an introduction to Micro Assembly Language using the IBM/PC. Topics include the architecture of the 80XX chip, addressing modes, and the 80xx instruction set. Programs will be written covering screen manipulation, calculations, table handling, and introduction to disk I/O.
Prerequisite: CIS 110 or CIS 113 or a CIS programming course or a passing score on the Programming Placement Test
Course fee

CIS 276 Operating Systems (3-0) 3 Hours
This course deals with operating systems at the functional level, concentrating on what an operating system does rather than how it does it. A major consideration will be describing the Virtual Memory Management.
Prerequisite: CIS 110 or CIS 113 or a CIS programming course or a passing score on the Programming Placement Test

CIS 277 Database Concepts (3-0) 3 Hours
This course will cover the essential concepts of relational databases using SQL (Structured Query Language). Students will develop skills necessary to effectively interact with an SQL database. Emphasis is on the SQL commands required for designing, accessing and manipulating databases. Students will gain practical hands-on experience using exercises and lab experiences.
Prerequisite: CIS 230 - AND - a CIS programming course or a passing score on the Programming Placement Test

CIS 278 Server-Side Programming (3-0) 3 Hours
This course is designed to emphasize server-side programming for the Internet. Topics include the fundamentals of server-side programming using server-side objects to create dynamic web pages and build an e-commerce site with shopping cart and server-side database connections. Students will gain an overall understanding of building a dynamic business based web site for today's corporate and small businesses. A major project will be required where the students will program their own dynamic website for e-commerce including a fully functional shopping cart. (It is recommended that CIS 210 be completed prior to enrollment in this course.)
Prerequisites: CIS 171 and CIS 277

CIS 290 Desktop Publishing (3-0) 3 Hours
An introduction to desktop publishing on the microcomputer. Students become familiar with basic desktop publishing terminology and to learn to produce documents containing both text and graphics. Publications may include advertising flyers, business forms and newsletters. Lab time outside of class is required.
Prerequisite: Language Proficiency
Course fee
May be taken twice, but any topic only once

CIS 291 CorelDRAW (3-0) 3 Hours
This course covers the DRAW module of CorelDRAW!. Drawing, text handling, and special effects such as Metamorphoses, Extrusions and PowerClip will be emphasized. Color, printing requirements, exporting and importing will also be addressed.
Prerequisite: Language Proficiency
Course fee

CIS 292 Advanced Desktop Publishing (3-0) 2 Hours
A continuation of CIS 290. Topics covered will include: the dictionary and table editors, exporting and importing, object linking and embedding, managing long publications, creating special effects and the new features of subsequent releases of PageMaker. Lab time outside of class is required.
Prerequisite: CIS 290
Course fee

CIS 299 Selected Topics in Computer Information Systems (Variable) 1-3 Hours
A course designed to meet the needs of students for specialized instruction in current computer information systems topics. Credit for this course, one to three hours, will be based on difficulty and depth of coverage for the selected topic.
NOTE: Topics will be identified for each section of the course; prerequisite depends upon the selected topic.
Course fee
May be taken four times, but any topic only once

COMPUTERIZED NUMERICAL CONTROL (CNC)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

CNC 110 CNC Operations I (2-2) 3 Hours
Set-up and operation of CNC FANUC controlled industrial vertical milling machines and turning centers.
NOTE: Machine shop experience or MTT 111 or MTT 112 is recommended.
Course fee
Offered fall and spring only.

CNC 115 CNC Programming I (2-2) 3 Hours
Provides students with the basic principles and practices of numerical control machining. Manual parts programming will be performed for CNC lathes and milling machines.
NOTE: It is recommended that either CNC 110, MTT 112 or machine tool industrial experience should precede this course. Shop math skills or MTH 115 are also recommended.
Course fee
Offered fall and spring only.

CNC 210 CNC Operations II (2-2) 3 Hours
Advanced set-ups, operations, and features of FANUC controlled CNC machine tools are covered including the use of a vertical machining center, and turning center and Wire EDM.
Prerequisite: CNC 110
Course fee
Offered spring only.
Offered summer only.

CNC 215 Mill Programming (2-2) 3 Hours
A continuation of CNC 115 including advanced manual part programming on a FANUC controlled CNC mill and 4 weeks of CNC Wire EDM. Sub programs, macros, threadmilling rotation and other transformations are also included.
NOTE: Industrial shop math or MTH 115 is strongly recommended.
Prerequisite: CNC 115
Course fee
Offered spring only.

CNC 216 Lathe Programming (2-2) 3 Hours
Designed as a continuation of Computerized Numerical Control Lathe manual programming. The nature of the material will range from lathe G&M codes to advanced level conversational programming, sub programs, macro and other advanced techniques..
NOTE: Industrial shop math or MTH 115 is strongly recommended.
Prerequisite: CNC 115

CNC 217 Introduction to Wire EDM Machining (2-2) 3 Hours
Designed as an introduction to the concepts of Operation and Programming of a FANUC CNC Wire Electrical Discharge Machine. The nature of the material will range from basic operation to G&M codes for programming.
NOTE: Students with Machine Shop or CNC Programming experience may contact the program coordinator if interested in alternative methods of meeting the prerequisite.
Prerequisites: CNC 110 and CNC 115
Offered spring only.

CNC 218 CAD/CAM Numerical Control (2-2) 3 Hours
Computer Aided Design and Manufacturing processes are discussed and implemented utilizing Master Cam software. Parts will initially be drawn in the CAD environment. The NC instructions necessary to drive a CNC machine tool to manufacture these parts will then be generated in the CAM environment.
NOTE: This is not a course to be taken without previous CAD experience.
Prerequisites: CAD 117 and CNC 115
Course fee
Offered fall only.
Offered spring only.

CNC 219 CNC Specialization (1-6) 4 Hours
An advanced CNC course in which the student chooses a topic of specialization. Topics may include areas such as programming 4 and 5 axis machines, NC tooling, conversational programming, robotics and CNC, digitizing, etc. Course work may be completed at an arranged industrial site.
NOTE: Manual Part Programming experience is strongly recommended.
Prerequisites: CNC 215 or CNC 216 and MTH 117
Course fee
Offered fall and spring only.

COOPERATIVE EDUCATION (EWE) EDUCATIONAL WORK EXPERIENCE

Cooperative Education Office, Room A216,
(847) 543-2058

Cooperative Education offers students the opportunity to earn credits for new learning in a work situation. Either a new or current job may qualify as a CO-OP work experience. Specific educational objectives are established for the work experience portion of CO-OP.

EWE 121 Introduction to Volunteerism (1-0) 1 Hour
This course is designed to introduce students to the ideas and responsibilities of volunteering. Students will be made aware of various service-oriented volunteer agencies and activities. They will choose a volunteer experience where both the agency involved and the student contract to perform definite and supervised services for a specific period of time.

EWE 220 Cooperative Work Experience I (Variable) 1-4 Hours
For career and transfer students. Specific learning objectives agreed upon by the student, the student's work supervisor and the college instructor shall be accomplished at the work site. One credit is required for the EWE seminar which focuses on topics such as resume writing, interviewing, and the psychology of work. Students who have met the prerequisite credit hours register for 1.00 credit hour for the seminar portion of CO-OP and 1.00 to 3.00 credit hours for the work portion of EWE 220.
May be taken four times for credit toward degree

EWE 270 Cooperative Work Experience II (Variable) 1-3 Hours
For select degree/certificate seeking second semester CO-OP students. Additional credit is earned for new educational objectives agreed upon by the student, the student's EWE work supervisor and college EWE instructor.

CRIMINAL JUSTICE (CRJ)

Social Science Division, Room A244,
(847) 543-2047

CRJ 111 Introduction to Policing (3-0) 3 Hours
This course examines the history, structure, and behavior of the police in American society. Students will be exposed to such topics as the heritage of American policing, police systems, the patrol function, police discretion, police-community relations, police accountability, and police and the Constitution.
Prerequisite: Language Proficiency

CRJ 117 Community-Based Corrections (3-0) 3 Hours
This course examines the use of the community in the treatment and control of individuals in the correctional process. Students are exposed to such topics as probation, parole, restitution, community service, deferred prosecution, work-release, halfway houses, group homes, and other strategies designed for community corrections.
Prerequisite: Language Proficiency

CRJ 118 Evidence Technology (2-2) 3 Hours
This course is an introduction to the scientific methods involved in the recognition, collection, and preservation of physical evidence at crime scenes. The value of physical evidence will be demonstrated. Problems and procedures in handling evidence are examined. The use of scientific methods, techniques, and instrumentation will be explored.
Prerequisite: CRJ 219

CRJ 119 Principles of Direct Supervision (3-0) 3 Hours
This course is designed to provide the student with the knowledge and skills necessary for the supervision of inmates in the direct supervision environment. An emphasis will be placed on the evolution of direct supervision jails, as well as the management styles, interpersonal skills, policies and procedures, and day-to-day operations of direct supervision facilities.
Prerequisite: Language Proficiency

CRJ 121 Introduction to Criminal Justice (3-0) 3 Hours
This course examines the legal process and the administration of justice in American society. Students will be exposed to the criminal process from the police function through adjudication, sentencing, and corrections, as well as the social, moral, and political issues involved in the administration of justice in a free society.
Prerequisite: Language Proficiency

CRJ 123 Introduction to Criminology (3-0) 3 Hours
This course is designed to familiarize the student with the social and legal aspects of crime in American society. An emphasis is placed on the definition of crime and deviance, the nature and extent of the crime problem, the history of criminology, criminological theory, violent crime, economic crime, public order crime, and victimology.
Prerequisite: Language Proficiency

CRJ 124 Penology and Corrections (3-0) 3 Hours
This course examines the history, philosophy, and administration of corrections in America. An emphasis will be placed on philosophies of punishment, sentencing strategies, the prison community, alternatives to incarceration, and various reform efforts. Critical issues facing corrections will be examined.
Prerequisite: Language Proficiency

CRJ 211 Criminal Procedural Law (3-0) 3 Hours
This course exposes the student to rules of criminal procedure in such areas as arrest, search and seizure, interrogation, use of force, and due process of law. An emphasis is placed on the constitutional interpretations of criminal procedure by the United States Supreme Court.
Prerequisite: Language Proficiency

CRJ 212 Traffic Law Enforcement (3-0) 3 Hours
This course is a survey of traffic law enforcement problems and responses. An emphasis will be on the history and growth of traffic problems, organization for traffic control, accident investigation, and the analysis and interpretation of accidents. Will also cover the traffic laws in the Illinois Vehicle Code.
Prerequisite: Language Proficiency

CRJ 213 Community Policing (3-0) 3 Hours
This course is a survey of community policing in the law enforcement field. An emphasis is placed on police-community relations, interpersonal skills, dealing with diversity, interacting with special populations in the citizenry, victims of crime, criminal offenders, and coordinated crime prevention efforts in the community.
Prerequisite: Language Proficiency

CRJ 214 Substance Abuse and Criminal Justice (3-0) 3 Hours
This course reviews the historical and sociological development of vice control and drug addiction. It will also cover the legal and operational problems of drug and vice control.
Prerequisite: Language Proficiency

CRJ 215 Issues in Criminal Justice (3-0) 3 Hours
This course explores critical issues related to the criminal justice system. An in-depth study of a specific current issue in criminal justice will be offered.
Prerequisite: Language Proficiency
May be taken twice, but any topic only once

CRJ 216 Police Management and Supervision (3-0) 3 Hours
This course analyzes the administration and management of police operations. An emphasis is placed on the distribution of personnel, specialized units, communication models, leadership principles, budgetary issues, management theory, and supervisory techniques appropriate to law enforcement.
Prerequisite: Language Proficiency

CRJ 218 Criminal Justice Internship (0-16) 3 Hours
This course is designed to broaden educational experience of students through appropriate observation of selected criminal justice agencies to correlate theory with actual practice. Students assigned to local criminal justice agencies and/or related agencies for a maximum of 16 hours per week.

CRJ 219 Principles of Criminal Investigation (3-0) 3 Hours
This course is an introduction of criminal investigation procedures; theory and practice of investigations. An emphasis is placed on methods of investigation for different types of criminal activity.
Prerequisite: Language Proficiency

CRJ 220 Independent Research (Variable) 1-3 Hours
This course involves independent research and study under the direct supervision of a faculty member. Subject must be approved by the assigned faculty member.
Prerequisites: Criminal Justice major and consent of the Criminal Justice coordinator

CRJ 221 Criminal Law (3-0) 3 Hours
This course explores the history and development of the criminal law as a system of social control. An emphasis is placed on legal principles and substantive law. Elements of a crime, specific statutes, and various affirmative defenses are analyzed.
Prerequisite: Language Proficiency

CRJ 229 Juvenile Delinquency (3-0) 3 Hours
This course is a study of the social, legal, and behavioral aspects of juvenile delinquency: organization, jurisdiction, and functioning of the juvenile court, police, and related agencies.
Prerequisite: Language Proficiency

CRJ 270 Criminal Justice Assessment Seminar (3-0) 3 Hours
This course is required of all the students completing the associate in applied science degree (A.A.S) in Criminal Justice. Students will be assessed as to the knowledge and foundational skills they have attained in the criminal justice program. Basic skills, thinking skills, and personal qualities will be evaluated as they relate to criminal justice occupations. Career development exercises will be conducted. A comprehensive examination is required.
Prerequisite: Sophomore Standing

DANCE (DNC)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

DNC 121 Introduction to Ballet I (3-0) 3 Hours
This course is designed for students interested in the fundamentals of ballet, whether they be beginning ballet dancers, teachers of theater movement, returning dancers, or persons interested in dance as a fine art. It is also designed so that any college student will develop his/her kinesthetic intelligence (literacy) at the place and experience of his or her technical background.

DNC 122 Modern Dance Technique I (3-0) 3 Hours
This course is designed for students interested in the fundamentals of modern dance, whether they be beginning dancers, teachers of theater movement, out of shape returning dancers, athletes, or persons interested in dance as a fine art. It is also designed so that a student will develop his/her kinesthetic intelligence (literacy) at the place and experience of his/her technical background. Modern Dance Technique I will develop physical proficiency in variable movements that apply to all dance genres. In addition, this course provides an aesthetics of dance that complements, but also broadens, spatial and kinetic perceptions found in ballet.

DNC 123 Jazz Technique I (3-0) 3 Hours
This course is designed for students interested in the fundamentals of jazz dance, whether they be beginning dancers, teachers of theater movement, athletes, out of shape returning dancers or persons interested in dance as a fine art. It is also designed so that any student will develop his/her kinesthetic intelligence (literacy) at the place and experience of his/her technical background.

DNC 125 Elements of Dance Composition I (3-0) 3 Hours
This course will explore the basic concepts of dance composition (i. e., space, time, gravity, energy), and aesthetic theories of choreography of dance, through variable choreographic assignments and exercises (both structured and directed improvisational , both western and non-western in style, genre, aim). This course will also include selected studies of acclaimed choreographers and their works in the history of dance. It is designed for any college student in need of rudimentary conceptual and kinetic skills necessary for the development of aesthetic awareness, and an increasing understanding of fine art dance choreography and/or dance education movement techniques.

DNC 221 Intermediate Ballet Technique (3-0) 3 Hours
This course is designed for students continuing beyond the fundamentals of ballet, and wishing to develop his/her ballet technique. Intermediate Ballet will particularly stress strength, flexibility, musical ability and endurance; as such barre exercises will progress to releve, and turns and batterie work will be doubled. Center work will also be extended, and if possible, some introductory pointe work will occur at mid -semester, (to be done only 15 minutes at the end of a class period).
Prerequisite: DNC 121

DNC 222 Intermediate Modern Dance Technique (3-0) 3 Hours
This course is designed for students continuing beyond the fundamentals of modern dance and wishing to develop his or her modern dance technique. Intermediate Modern Dance Technique is for beginnng dancers, teachers of theater movement, out of shape returning dancers, athletes, or persons interested in dance as a fine art. It is also designed so that a student will develop his/her kinesthetic intelligence (literacy) at the place and experience of his/her technical background. Therefore, various great choreographers will be explored and imitated through various class sessions.
Prerequisite: DNC 122

DENTAL HYGIENE (DHY)

Biological & Health Sciences Division, Room C140, (847) 543-2042

DHY 111 Principles of Dental Hygiene (2-0) 2 Hours
This course provides students with an introduction to the knowledge and skills to control and prevent dental disease. Principles of disease transmission, infection control, patient assessment and fundamental instrumentation will be presented.
Prerequisite: Admission to the Dental Hygiene Program

DHY 112 Principles in Dental Hygiene (2-0) 2 Hours
This course is a continuation of DHY 111. The fundamental theories necessary to perform oral prophylaxis treatment will be the focus. The principles and procedures will be systematically presented through lectures, reading assignments and case-based activities. Emphasis will be placed on instrumentation, selective polishing, fluoride mechanisms and applications, medical emergencies, and basic specialized dental hygiene procedures including root planing and ultrasonic scalers.
Prerequisites: DHY 111, DHY 113, DHY 115, DHY 117, DHY 119, and DHY 171 (C or better in each)

DHY 113 Pre-Clinical Dental Hygiene (0-6) 2 Hours
This course provides clinical practice in fundamental dental hygiene and instrumentation skills on manikin (typodont) models and student partners.
Corequisite: DHY 111

DHY 114 Clinical Dental Hygiene I (0-8) 2 Hours
This course is a continuation of DHY 113 and provides clinical practice in fundamental dental hygiene instrumentation of skills on manikin (typodont) models and student partners. Beginning patient treatment is also included.
Corequisite: DHY 112

DHY 115 Head and Neck Anatomy (3-0) 3 Hours
This course provides the students with an introduction to the microscopic characteristics of the tissues of the oral cavity. Human histology and orofacial embryology will also be introduced. The course includes detailed study of the anatomy of the head and neck with special emphasis on the human skeletal, muscular, glandular, circulatory, nervous and epithelial structures.
Corequisite: DHY 111

DHY 116 Dental Radiology I (2-3) 3 Hours
This course provides the basic fundamentals of radiology. Theory in radiation physics, safety and biological effects of ionizing radiation will be introduced. The laboratory portion of the course introduces intraoral exposure techniques, processing, mounting and fundamental interpretation of dental radiographs.
Corequisite: DHY 112
Course fee

DHY 117 Dental Anatomy (2-0) 2 Hours
This course introduces the students to terminology relating to anatomic structures of the oral cavity. Special emphasis is placed on the teeth and root morphology of both primary and permanent teeth and occlusal classification.
Corequisite: DHY 111

DHY 118 General and Oral Pathology (2-0) 2 Hours
This course focuses on the fundamentals of the general and oral pathological processes. Emphasis is placed on the diseases and disease processes of the periodontal tissues and oral structures. Clinical manifestations of disease will be correlated with dental hygiene practice.
Corequisite: DHY 112

DHY 119 Nutrition and Biochemistry (2-0) 2 Hours
The course provides the students with a foundation of the fundamental principles of oral biochemistry, and biochemistry. Emphasis will be placed on nutrition and the effects of nutrition on the oral cavity and supporting structures of the teeth, and assessment of patient's nutritional needs.
Corequisite: DHY 111

DHY 171 Preventative Dental Hygiene (1-0) 1 Hour
This course provides students with a foundation of knowledge in the activities in the activities of preventive dental hygiene. Topics include fluoride, dentifrice application, tooth brushing and flossing techniques, dental hygiene aids, and periodontal antimicrobial products and techniques.
Corequisite: DHY 111

DHY 172 Medical Emergencies (1-0) 1 Hour
This course provides the student with an understanding of medical emergency situations in the dental office setting. Emphasis will be placed on prevention, preparation and management of life-threatening situations. Legal issues faced in the dental office when a medical emergency occurs will be introduced
Corequisite: DHY 112

DHY 174 Introduction to Periodontics (2-0) 2 Hours
This course introduces the student to the fundamental theories of periodontics. The course focuses on macro and micro anatomy, biochemistry and physiology of the periodontium. Epidemiology, microbiology and the etiology of periodontal disease will also be included.
Corequisite: DHY 112

DHY 176 Dental Material and Expanded Function (2-2) 3 Hours
This course provides fundamental information about the use and manipulation of materials used in dentistry and expanded functions performed by dental auxiliaries. Emphasis is placed on materials and functions utilized by the dental hygienist.
Corequisite: DHY 112
Course fee

DHY 178 Review of Dental Literature (1-0) 1 Hour
This course introduces the fundamental skills to review and interpret dental scientific literature. The course includes an introduction to research methodologies and statistical analysis
Prerequisite: DHY 112, DHY 114, DHY 116, DHY 118, DHY 172, DHY 174, and DHY 176 (C or better in each)

DHY 179 Clinical Dental Hygiene II (0-12 hours) 2 Hours
This course provides the clinical practice and management in oral prophylaxis on the child, young adult and adult patient. Preventive techniques and exposing of radiographs is also included.
Prerequisite: DHY 178
Course fee

DHY 211 Theory and Practice of Dental Hygiene I (2-0) 2 Hours
This course is a continuation of DHY 179. Emphasis is placed on instrumentation techniques, pain control and medically compromised and special needs patients.
Prerequisite: DHY 178 and DHY 179 (C or better in both)

DHY 212 Theory and Practice of Dental Hygiene II (1-0) 1 Hour
This course is a continuation of DHY 211. Emphasis is placed on management and treatment of special needs and medically compromised patients.
Prerequisites: DHY 211, DHY 213, DHY 217, DHY 219, DHY 271, and DHY 273 (C or better in each)

DHY 213 Clinical Dental Hygiene III (0-12 hours) 4 Hours
The course provides clinical practice and management in oral prophylaxis on the adult and periodontally involved patient. Periodontal and preventive techniques and exposing of radiographs is also included
Corequisite: DHY 211

DHY 214 Clinical Dental Hygiene IV (0-12 hours) 4 Hours
This course provides clinical practice and management in oral prophylaxis and periodontal therapy on the adult patient. Preventive techniques and exposing of radiographs is also included
Corequisite: DHY 212

DHY 215 Dental Radiology II (0-3 hours) 1 Hour
This course continues practice in the techniques of exposing, processing, mounting and evaluating dental radiographs.
Corequisite: DHY 211
Course fee

DHY 216 Ethics, Jurisprudence, and Practice Management (0-3 hours) 2 Hours
This course provides the students with the skills needed for successful clinic practice management. Emphasis is placed on professional relationships and the various roles dental hygienists encounter in the various dental specialties. The course includes ethical and legal obligations by the dental professionals to the community and public it serves
Corequisite: DHY 212

DHY 217 Dental Pharmacology and Anesthetic (2-0) 2 Hours
This course provides the student with up-to-date, accurate information on topics including antineoplastic drugs, respiratory and gastrointestinal drugs, hormones, and drugs to treat common oral diseases. The course also focuses on the fundamental pharmaceutical concepts of local anesthetic.
Corequisite: DHY 211

DHY 218 Dental Radiology III (0-3 hours) 1 Hour
This course continues to focus on exposing, mounting, processing, and interpreting dental radiographs. Emphasis is placed on increasing student competency level in interpretation and technique of both intra and extraoral radiographic exposures.
Corequisite: DHY 212
Course fee

DHY 219 Advanced Periodontics (2-0) 2 Hours
Course content includes additional knowledge required to diagnose and treat periodontal diseases, clinical management of the periodontium and adjunctive therapies relevant to the maintenance of periodontal health. Emphasis is placed on the differential diagnosis and treatment of periodontal disease. Surgical and post- surgical topics will also be covered in this course.
Corequisite: DHY 211

DHY 271 Community Dentistry I (2-0) 2 Hours
This course introduces the current concepts of community health. The course focuses on how community dental health issues relate to the delivery of dental care to society. Emphasis is placed on the value of the role of the dental hygienist in public health.
Corequisite: DHY 211

DHY 272 Community Dentistry (0-4) 1 Hour
This course focuses on implementation and evaluation of community outreach programs and the delivery of dental care to society.
Corequisite: DHY 212

DHY 273 Applied Dental Radiology (2-0) 2 Hours
Emphasis is placed on oral and maxillofacial radiologic interpretation. Students will learn to identify pathological processes through the use and observation of the changes produced on radiographs by disease.
Corequisite: DHY 211

DHY 274 Advanced Dental Hygiene (2-0) 2 Hours
This course provides the student with advanced and complex dental hygiene theory and background. Emphasis is placed on advanced instrumentation and skills necessary for treating patients with nontraditional, extraordinary conditions.
Corequisite: DHY 212

DRAFTING (DFT)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

DFT 111 Drafting I (3-5) 5 Hours
Designed to introduce the student to the tools and techniques of the CAD-drafting profession. CAD-drafting skills are learned through intensive classroom practice using AutoCAD Computer Aided Design Software and through discussions and demonstrations using professionally prepared materials. Topics included are: geometric constructions, multiviews, sections, dimensioning and tolerancing along with pictorial views.
Course fee
Offered fall only.

DFT 112 Drafting II (3-5) 5 Hours
A continuation of Drafting I. Computer-aided design skills are advanced through exploration of auxiliary views, developments, working drawings and descriptive geometry.
Prerequisite: DFT 111 or EGR 121
Course fee
Offered spring only.

DFT 113 Technical Illustration (2-2) 3 Hours
Promotes both knowledge and skills in illustration of mechanical parts and assemblies using various CAD techniques. Areas of concentration include oblique, isometric, dimetric, trimetric, and perspective drawing.
Prerequisite: DFT 111 or EGR 121
Course fee

EARLY CHILDHOOD EDUCATION (ECE)

Social Science Division, Room A244, (847) 543-2047

ECE 115 Music Activities for Young Children (1-2) 2 Hours
Descriptive lecture and experiential music activities emphasize integrating music into the preschool program. Singing, listening, creative movement, and rhythm instruments are included. Previous music experience is not required.
Prerequisite: Language Proficiency

ECE 116 Creative Activities I (2-2) 3 Hours
This course is an overview of techniques of conducting creative activities with young children, including experience in art, music, language arts, science, math, and social play.
Prerequisite: Language Proficiency

ECE 119 Language Development and Activities for Young Children (3-0) 3 Hours
This course focuses on the development of speech and language in the young child. It includes assessment of child language, methods of facilitating language development, practical curriculum activities, and criteria for literature selection.
Prerequisite: Language Proficiency

ECE 131 The Special Needs Child in ECE (3-0) 3 Hours
The course will focus on practical techniques for working with special needs children in the regular early childhood setting. It includes characteristics of young special needs children and modifications in curriculum, routines, and classroom management for children with various types of special needs.
Prerequisite: Language and Math Proficiency

ECE 214 Group Care of Infants and Toddlers (3-0) 3 Hours
This course is an overview of infant and toddler programs and includes the care and protection of very young children, developmental-educational curriculum, physical and social environments. Required field experience of 20 hours.
Prerequisite: PSY 222

ECE 221 Principles of Early Childhood Education (3-0) 3 Hours
This course is an overview of early childhood care and education. It includes historical and philosophical influences on early childhood education, program planning, curriculum, indoor and outdoor environments, current issues, organizational structure, guidance techniques, and comparative early childhood programs.
Prerequisite: PSY 222

ECE 223 Child, Family, and Community (3-0) 3 Hours
The course focuses on the child in the context of family and community. It emphasizes the teacher's role in working with the child's family and community; stresses parent education, diversity in families, and legal responsibilities; and specifies criteria and techniques for formulating effective home-school partnerships. Class discussions and assignments will require student analysis and critical evaluation skills.
Prerequisite: Language Proficiency

ECE 231 School-Age Programming (3-0) 3 Hours
This course examines knowledge and skills needed to work effectively with school-age children from diverse cultural and socioeconomic backgrounds. It focuses on planning, organizing, and implementing appropriate curriculum for school-age children in organized childcare programs.
Prerequisite: Language Proficiency

ECE 232 Math and Science for Young Children (2-0) 2 Hours
The course incorporates theoretical, research, and pedagogical components related to mathematics and science for the young child. It emphasizes planning, preparation, and evaluation of appropriate activities and materials for use in early childhood math and science curriculum.
Prerequisite: Language and Math Proficiency

ECE 270 Administration of Early Childhood Programs (3-0) 3 Hours
This course is designed for students who are interested in becoming or who are currently serving as directors of early childhood programs. The course will acquaint students with the organization, management, and evaluation of programs serving young children. Staff selection and supervision, parent/community relationships, fiscal management, and computer applications will be included.
Prerequisite: PSY 222 and HUS 221

ECE 271 Early Childhood Education Practicum I (1-12) 4 Hours
This course includes supervised work experience in an early childhood program. It includes observation and assessment of children, interaction with children and parents, planning and implementing curriculum activities, and working as part of the teaching team.
Prerequisite: Language proficiency, Sophomore standing, GPA of 2.4, and coordinator's approval 60 days prior to the first day of the semester for which the practicum is requested.

ECE 272 Early Childhood Education Practicum II (1-12) 4 Hours
This course is a continuation of supervised work experience in an early childhood program. The student is guided from the Practicum I level of limited leadership to a level of total responsibility for programming during the hours the student serves at the practicum site. A total of 180 practicum hours, plus 30 hours of supervision.
Prerequisite: ECE 271 (C or better), Sophomore standing, GPA of 2.4 or higher, and coordinator's approval at least 60 days prior to the first day of the semester for which the practicum is requested

ECONOMICS (ECO)

Social Science Division, Room A244,
(847) 543-2047

ECO 110 Economics for Business and Industry (3-0) 3 Hours
This course surveys fundamental microeconomic and macroeconomic principles to provide the student with the basic tools to analyze current economic problems and policies. It is intended for majors in business and technical career fields. Recommended for career curriculum students.
Prerequisite: Language Proficiency

ECO 221 Principles of Macroeconomics (3-0) 3 Hours
The course surveys basic economic concepts with an emphasis on macroeconomic analysis and fiscal and monetary policies. Current economic problems such as inflation, unemployment, and stagflation are studied from the perspective of various economic models (e.g. Classical, Neo-Keynesian, Neo-Classical, Monetarist, and Rational Expectations Models). This discussion also includes an analysis of the dilemmas and debate confronted by macroeconomic policymakers.
Prerequisite: Language Proficiency
IAI: S3 901

ECO 222 Principles of Microeconomics (3-0) 3 Hours
The course surveys basic microeconomic concepts such as supply and demand, profit maximization, theory of the firm, competition vs. monopoly, resource pricing and select current economic problems.
Prerequisite: Language Proficiency
IAI: S3 902

ECO 223 Money and Banking (3-0) 3 Hours
The course emphasizes the economic and monetary theory of money and banking in the U.S. It includes a discussion of the impact of monetary policy decisions of the Federal Reserve System upon the aggregate economy using macro-economic analysis. Contrasts and comparisons regarding the relative effectiveness of fiscal and monetary policies are also discussed.
Prerequisite: ECO 221

ECO 224 Public Finance (3-0) 3 Hours
Public Finance explains the economic functions of government in a capitalistic economic system, the public goods, distribution and stabilization functions, with primary emphasis being given to public goods and distribution functions. Topics such as cost-benefit analysis and ability to pay and benefit principles of taxation are explained as well as the relationship between monetary policy and debt-management.
Prerequisite: ECO 221

ECO 225 Comparative Economic Systems (3-0) 3 Hours
The course analyzes economic conditions as they exist in different economic systems. It emphasizes the trade-offs between efficiency and equity, between economic freedom and economic order and between the market mechanism and economic planning. The course investigates these problems through theoretical and case-study approaches.
Prerequisite: ECO 221

EDUCATION (EDU)

Social Science Division, Room A244,
(847) 543-2047

EDU 120 Observation/Guidance of Children (2-0) 2 Hours
This course focuses on observational techniques and guidance practices appropriate to early childhood settings. It involves in-depth study of young children through direct observation of and participation with children 6 weeks to 8 years of age in an organized environment. Includes the following techniques of child study: case study, anecdotal records, running records, time sampling, experience sampling, informal assessment. Thirty hours of guided observation and participation in an early childhood classroom are required.
Prerequisite: Language Proficiency

EDU 221 Introduction to Teaching (3-0) 3 Hours
This course is an orientation to profession and study of nature of teaching, its opportunities and responsibilities. Scope of American public education studied. There is an opportunity for directed observation of all grade levels.
Prerequisite: Language Proficiency

EDU 222 The Exceptional Child (3-0) 3 Hours
This course is an overview of children and adolescents with exceptional cognitive, physical, social, and emotional characteristics, including learning disabilities. It includes assessment, screening, educational needs, family communication, community resources, and legal aspects.
Prerequisite: PSY 222

EDU 299 Special Topics in Education (Variable) 1-3 Hours
Special topics in the field of education will be developed. Topics will focus on a specific current issue in the areas of early childhood, elementary , secondary, or special education. A maximum of 6 credit hours of EDU 299 may be used as elective credit toward an A.A. or A.A.S. degree in education.
Prerequisite: Language Proficiency
May be taken four times, but any topic only once

EDUCATIONAL WORK EXPERIENCE (EWE)

See Cooperative Education page 166.

ELECTRICAL TECHNOLOGY (ELC)

Engineering, Math, Physical Sciences Division,
Room B162, (847) 543-2044

ELC 113 Basic Instrumentation and Shop Practice (1-2) 2 Hours
An introduction to electronic measurements, repair and construction techniques and the identification and testing of electronic components.
NOTE: Recommended preparation concurrent enrollment in ELT 170 and ELC 172 or equivalent knowledge.
Course fee
Offered fall only.

ELC 114 Motor and Machine Controls (2-3) 3 Hours
Describes control circuits and components used in industry with particular attention to motor controls. Material includes controller characteristics and applications.
NOTE: Recommended preparation ELT 170 and ELC 172 or equivalent knowledge.
Course fee

ELC 171 Programmable Logic Controllers (2-2) 3 Hours
In this course, students will learn what a Programmable Logic Controller is, how a PLC works, and how to install a PLC in an automated system. Students will also learn the basics of programming a PLC using a relay ladder logic and Boolean functions. Troubleshooting systems with PLC's will also be studied.
NOTE: Recommended preparation ELT 170 and ELC 172 or equivalent knowledge.
Course fee

ELC 172 Applied AC Circuit Theory (1.5-1) 2 Hours
Fundamentals of AC circuit theory and application. Includes topics of capacitance, inductance, time constants, reactance, RLC AC circuits, transformers, relays, filters and mathematics as required. ELC 172 is a continuation of ELT 170 for the Electrical/Electronic Maintenance Certificate.
NOTE: Recommended preparation ELT 170 and MTH 114 or MTH 117 or equivalent knowledge.
Course fee

ELC 173 DC Analysis-Network Theorems (1.5-1) 2 Hours
Introduction to network theorems and solutions, to include Thevenin's Theorem, Norton's Theorem, Mesh analysis, Nodal analysis, superposition and other analysis techniques.
NOTE: Recommended preparation ELT 170 and MTH 117 or MTH 122 or equivalent knowledge.
Course fee

ELC 174 AC Fundamentals (1.5-1) 2 Hours
AC circuitry including fundamental sine wave analysis, inductance, capacitance, voltage and current phase relationships. AC problem solving, complex notation and application.
NOTE: Recommended preparation ELC 173, MTH 118 or MTH 123 or equivalent knowledge.
Course fee

ELC 175 AC Analysis and Circuit Theorems (1.5-1) 2 Hours
AC network theorems and solutions, to include Thevenin's Theorem, Norton's Theorem, Mesh analysis, Nodal analysis, superposition and other analysis techniques. Series and parallel resonance will also be included with discussion of passive filter operation. ELC 175 is a continuation of ELC 174 for the Electronics Engineering Technology AAS degree.
NOTE: Recommended preparation ELT 170, ELC 173, MTH 118 or MTH 123 or equivalent knowledge.
Course fee

ELC 211 Electrical Machinery (2-3) 3 Hours
Principles of design and construction of many types of motors and generators including servos, synchros, amplidyne generators, motor and generator control circuits, and industrial application. Course oriented to troubleshooting and repair techniques.
NOTE: Recommended preparation ELT 170 and ELC 172 or equivalent knowledge.
Course fee

ELC 215 Power Transmission and Distribution (3-3) 4 Hours
Methods of generating, controlling transmitting, and distributing electrical power and utilization of electrical power by industry.
NOTE: Recommended preparation ELT 170 and ELC 172 or equivalent knowledge.
Course fee

ELC 276 Electrical Industrial Safety (2-0) 2 Hours
This course provides a study of the safety practices and procedures that are required in the electrical industry. The nature of electrical work palces electricians in potentially harmful situations on a regular basis. Electricians must be aware of the proper safety precautions in order to avoid accidents which could lead to injury or even death. This couse will include safety related to electrical shock, safety requirements in the use of power tools, safety in the working environment.

ELECTRICIAN APPRENTICESHIP (EAP)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

EAP 111 Electrician Apprenticeship Work Experience I (0-4) 2 Hours
This course provides a planned educational experience in the Electricians Apprenticeship program by placing the student in a supervised educational work experience. Specific learrning objectives agreed upon by the student and the students work supervisor shall be accomplished through "on the job" experience and training. This course is the first of a series of five work-based learning (apprenticeship) courses to be completed. The student will complete an EAP course in each of the five years of the apprenticeship.
NOTE: Requirements: Admission into the Local IBEW 150 Apprenticeship Progarm. Job placement with a registered journeyman electrician

EAP 112 Electrician Apprenticeship Work Experience II (0-4) 2 Hours
This course provides a planned educational experience in the Electricians Apprenticeship program by placing the student in a supervised educational work experience. Specific learrning objectives agreed upon by the student and the students work supervisor shall be accomplished through "on the job" experience and training. This course is the second in a series of five work-based learning (apprenticeship) courses to be completed. The student will complete an EAP course in each of the five years of the apprenticeship.
NOTE: Requirements: Admission into the Local IBEW 150 Apprenticeship Progarm. Job placement with a registered journeyman electrician

EAP 113 Electrician Apprenticeship Work Experience III (0-4) 2 Hours
This course provides a planned educational experience in the Electricians Apprenticeship program by placing the student in a supervised educational work experience. Specific learrning objectives agreed upon by the student and the students work supervisor shall be accomplished through "on the job" experience and training. This course is the third in a series of five work-based learning (apprenticeship) courses to be completed. The student will complete an EAP course in each of the five years of the apprenticeship.
NOTE: Requirements: Admission into the Local IBEW 150 Apprenticeship Progarm. Job placement with a registered journeyman electrician

EAP 114 Electrician Apprenticeship Work Experience IV (0-4) 2 Hours
This course provides a planned educational experience in the Electricians Apprenticeship program by placing the student in a supervised educational work experience. Specific learrning objectives agreed upon by the student and the students work supervisor shall be accomplished through "on the job" experience and training. This course is thefourth in a series of five work-based learning (apprenticeship) courses to be completed. The student will complete an EAP course in each of the five years of the apprenticeship.
NOTE: Requirements: Admission into the Local IBEW 150 Apprenticeship Progarm. Job placement with a registered journeyman electrician

EAP 115 Electrician Apprenticeship Work Experience V (0-4) 2 Hours
This course provides a planned educational experience in the Electricians Apprenticeship program by placing the student in a supervised educational work experience. Specific learrning objectives agreed upon by the student and the students work supervisor shall be accomplished through "on the job" experience and training. This course is the fifth in a series of five work-based learning (apprenticeship) courses to be completed. The student will complete an EAP course in each of the five years of the apprenticeship.
NOTE: Requirements: Admission into the Local IBEW 150 Apprenticeship Progarm. Job placement with a registered journeyman electrician

ELECTRONICS ENGINEERING TECHNOLOGY (ELT)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

ELT 111 Electronic Drafting (1-3) 2 Hours
Drawing of electronic components and wiring diagrams, with emphasis on national standards and codes. Pspice schematic capture and PC board software will be introduced.
Course fee

ELT 113 Transistor Electronics (3-2) 4 Hours
Principles of transistors including bipolar devices and FETS. The hybrid PI and hybrid parameter models will be used.
NOTE: Some degree of mathematical proficiency is required for students to follow analysis. Recommended preparation ELC 174 and ELC 175.
Course fee
Offered fall only.

ELT 115 Electronic Laboratory Techniques (1-2)2 Hours
Common techniques for prototypes and circuit fabrication are taught, including wire-wrapping and printed circuit processes. The student will be expected to pursue and complete two laboratory projects of his/her choice with the instructors approval.
NOTE: EWE 220 may substitute. Recommended preparation sophomore standing or consent of department.
Course fee
Offered spring only.

ELT 116 Technical Programming (3-0) 3 Hours
This course will be taught using C++ as the programming language. Examples and programming problems will be drawn from the general body of technical problems.
NOTE: Recommended preparation MTH 117 or MTH 122 or equivalent knowledge.
Course fee

ELT 117 Industrial Digital Electronics I (2-2) 3 Hours
An introduction to digital electronics with an emphasis on analysis and troubleshooting aspects of digital electronics. It is a part of the one year certificate maintenance program.
NOTE: Recommended preparation high school algebra or concurrent enrollment in MTH 114 and ELT 170 or equivalent knowledge.
Course fee

ELT 118 Industrial Digital Electronics II (2-2) 3 Hours
Continuation of ELT 117. Emphasis will be on the troubleshooting aspects of digital electronics. This course is a part of the one-year certificate maintenance program.
NOTE: Recommended preparation ELT 170, ELT 172, ELT 117 or equivalent.
Course fee

ELT 151 PC Hardware Fundamentals (2-2) 3 Hours
This course will cover the basic components of a PC, including mother boards, memory, disk drives, cases and power supplies. Computers will be disassembled, reassembled and configured to operate.
NOTE: Recommended preparation CIS 120 and concurrent enrollment in ELT 170 or equivalent knowledge.
Course fee

ELT 152 PC Peripherals and Troubleshooting (2-2) 3 Hours
This course will cover the common peripheral components of a PC, including modems, Sound cards, network interface cards (NIC), and printers. Additionally, troubleshooting of hardware components will be presented, including diagnostic hardware and software. Preventative maintenance issues will be explored.
Prerequisite: ELT 151
Course fee

ELT 170 DC Circuit Fundamentals (1.5-1) 2 Hours
Topics include definition of voltage, current, resistance, and power. Also includes Ohm's Law, Kirchoff's Laws as applied to series and parallel circuits.
NOTE: Recommended preparation MTH 114, MTH 117, MTH 122 or equivalent knowledge.
Course fee

ELT 171 Industrial Control Systems (2-2) 3 Hours
A study of the electrical/electronic systems used in the control of machinery and processes in industry, and the electrical/electronic systems used to measure, monitor and control the factors involved in the manufacturing process. Emphasis will be on operation and troubleshooting of the electronics involved. Students will gain experience using instrumentation and measuring devices that simulate control situations.
NOTE: Recommended preparation ELT 170 and ELC 172 or equivalent knowledge.
Course fee

ELT 172 Applied Communications Circuits (2-2)3 Hours
A survey of various communications systems. AM/FM radio systems as well as video communications systems will be included. The troubleshooting aspects of the various circuits will be emphasized.
NOTE: Recommended preparation ELT 170 and ELC 172 or equivalent knowledge.
Course fee

ELT 173 Applied Analog Circuits (2-2) 3 Hours
Introduction to the theory of operation of electronic devices used in amplifiers, oscillators, power supplies and control circuits.
NOTE: Recommended preparation ELT 170, ELC 172 and ELC 113 or equivalent knowledge.
Course fee

ELT 211 Advanced Solid State Electronics (2-2) 3 Hours
Continuation of ELT 113 with the development of frequency response characteristics of transistors and IC amplifiers. Linear IC's will be studied, including function generators, op amps, regulators and phase lock loops.
NOTE: Recommended preparation ELT 113 or equivalent knowledge.
Course fee
Offered spring only.

ELT 212 Electronic Communications Systems (2-3) 3 Hours
Principles of operation and design of electronics equipment including radio fundamentals, radio receivers, transmitters, antennas and transmission of RF energy. Digital communications will be covered.
NOTE: Recommended preparation ELT 113, ELC 174 and ELC 175 or equivalent knowledge.
Course fee
Offered spring only.

ELT 213 Introduction to Digital Electronics (3-2) 4 Hours
Principles of operation, performance, and design of digital computers and digital instrumentation. Number systemsincluding binary; Boolean algebra and application to digital logic; digital logic circuits; computer organization and operation; digital logic application to electronic instrumentation.
NOTE: Recommended preparation MTH 117 or MTH 122 or equivalent knowledge.
Course fee

ELT 214 Microwave Systems and Measurements (2-3) 3 Hours
Continuation of ELT 212. Systems of electronic application other than radio communication with emphasis on microwave circuitry, devices, and systems including microwave power, frequency, etc. with emphasis on use of specialized microwave test equipment.
NOTE: Recommended preparation ELT 211 and MTH 211 or equivalent knowledge.
Course fee

ELT 216 Microprocessors I (2-3) 3 Hours
Introductory course in microprocessors dealing with hardware and software. The Pic micro controller will be used as the target processor. Hardware configuration including CPU, Memory, and I/O will be studied as well as the instruction set.
NOTE: Recommended preparation ELT 213 and ELT 116 or equivalent knowledge.
Course fee
Offered fall only.

ELT 217 Microprocessors II (2-2) 3 Hours
Second course in microprocessor electronics and follows ELT 216. Intended to be part of the Associate Degree in Electronics. 80xxx series of microprocessors are covered with introductions to assembly language and C. Concentration is on control applications.
NOTE: Recommended preparation ELT 216 or equivalent knowledge.
Course fee

ELT 271 Circuit Analysis Computer Techniques (3-0) 3 Hours
Passive and Active circuits will be analyzed using the evaluation version of Pspice. Circuit behavior will be studied and in some cases circuits will be modified to meet certain design criteria. DC, AC and transient analysis will be performed as well as spectral analysis using the Pspice FFT. This course is intended for presentation via Internet. Required preparation: AC and DC circuit courses and one calculus course.

ELT 272 Circuit Analysis Techniques (3-0) 3 Hours
This course is intended to introduce the student to the use of calculus and transform techniques to circuit analysis. Solutions to first order equations will be done with calculus. Laplace transforms will be introduced and solutions to first and second order circuit will be covered. Circuit solutions using phasor techniques will be reviewed and Pspice will be used to support the class. This course is intended for Internet presentation. Recommended preparation: AC, DC circuit courses and one devices course including transistors.

ELECTRONICS MANUFACTURING (EMF)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

EMF 111 Electronics Math I (2-0) 2 Hours
Introduces topics in algebra, trigonometry, and problem solving techniques as it applies to the Electronic Manufacturing Program within an industrial setting.
Prerequisite: MTH 117

EMF 112 Electronics Math II (2-0) 2 Hours
Continues the use of algebra to solve linear equations. The quadratic equation is introduced along with right triangle trigonometry.
Prerequisite: EMF 111 (C or better)

EMF 113 Electronics Math III (2-0) 2 Hours
Continues EMF 112 with additional topics in trigonometry, logarithms, and exponents. Introduces complex numbers and complex arithmetic with practical applications.
Prerequisite: EMF 112 (C or better)

EMF 114 Electronics Math IV (2-0) 2 Hours
Introduces the inverse trigonometric functions and continues the study of complex algebra. Calculus concepts such as the limit, derivative, and integral are introduced on a rudimentary level. The calculator is used to show applications of derivatives and integrals to solve technical problems.
Prerequisite: EMF 113 (C or better)

EMF 132 Technical Programming I (1.5-0) 1.5 Hours
Introduces the student to computer usage in the electronics/manufacturing environment. Basic software packages are used in the electronics manufacturing setting.

EMF 133 Technical Programming II (1.5-0) 1.5 Hours
Introduces computer programming through a structural language. Technical programming is developed through problems formulated in an electronics manufacturing climate. Documentation of programs within the industrial/technical setting is emphasized.
Prerequisite: EMF 132 (C or better)

EMF 134 Digital Electronics I (1.5-1) 2 Hours
Covers TTL and CMOS eombinatorial logic circuits. Boolean Algebra and Karnaugh Mapping are tools used to analyze all logic systems. Common logic circuits such as adders, decoders, multiplexors, and parity generators are built and tested.

EMF 135 Digital Electronics II (1.5-1) 2 Hours
Introduces basic flip-flop circuits. Counters and shift registers are analyzed showing applications in practical systems. Serial and parallel movement of data is covered along with troubleshooting methods.
Prerequisite: EMF 134 (C or better)

EMF 136 DC Circuit Analysis I (1.5-2) 2.5 Hours
Serves as the foundation course for all analog circuit analysis. The fundamental quantities of electric circuits are defined and basic units of measurement are emphasized in the laboratory. Ohm's Law, Kirchoff's Laws and the basic series and parallel circuit configurations are analyzed.
Prerequisite: EMF 114 (C or better)

EMF 137 DC Circuit Analysis II (1.5-2) 2.5 Hours
Continues the study of DC circuit analysis. The fundamental theorems of circuit analysis are covered along with the development of node and loop equations.
Prerequisite: EMF 136 (C or better)

EMF 170 Electronics Manufacturing Internship I (1-2) 2 Hours
Applies appropriate skills to the electronics manufacturing and electronics technology field.
Prerequisite: EMF 135 (C or better)

EMF 171 Electronics Manufacturing Internship II (.5-1) 1 Hour
Participates in appropriate technician level competencies and problem-solving skills related to the electronics manufacturing field.
Prerequisite: EMF 170 or consent of coordinator

EMF 172 Electronics Manufacturing Internship III (1-2) 2 Hours
Applies appropriate technician level applications and skill based seminars which enhance technician skills and competencies used in the electronics manufacturing environment.
Prerequisite: EMF 171 or consent of coordinator

EMF 230 AC Circuit Analysis I (1.5-1) 2 Hours
Introduces the analysis of AC circuits using principles, theorems and equations developed in DC Circuit Analysis (EMF 136/137). The fundamental circuit components of resistance, inductance and capacitance are studied with respect go changes in frequency. Builds on a strong foundation of complex numbers and trigonometry applied to the analysis of AC circuits. Time constants of simple circuits are analyzed.
Prerequisite: EMF 137 (C or better)

EMF 231 AC Circuit Analysis II (1.5-1) 2 Hours
Continues the study of AC circuits by developing the concepts of resonance, power, and filter response. Frequency response characteristics of circuits will be stressed throughout.
Prerequisite: EMF 230 (C or better)

EMF 232 Linear Devices I (1.5-1) 2 Hours
Introduces semi-conductor electronic devices. The DC theory of operation is emphasized throughout. The characteristic curves and DC biasing are developed. Simple troubleshooting techniques are defined.
Prerequisite: EMF 137 (C or better)

EMF 233 Linear Devices II (1.5-1) 2 Hours
Introduces the AC equivalent of semiconductor diode and amplifier circuits. Power amplifiers are analyzed and the FET is introduced. Several common amplifier configurations are analyzed.
Prerequisite: EMF 232 (C or better)

EMF 234 Microprocessors I (1.5-1) 2 Hours
Introduces microprocessor using the 8 bit machine. Basic computer arithmetic is covered along with memory and bus structure.
Prerequisite: EMF 135 (C or better)

EMF 235 Microprocessors II (1.5-1) 2 Hours
Continues the study of the 8 bit microprocessor. Addressing structures are covered along with simple program writing. Hardware configurations and its relation to input/output, interrupts and DMA are introduced.
Prerequisite: EMF 234 (C or better)

EMF 236 Microprocessors III (1.5-1) 2 Hours
Continues the study of microprocessors into the 16 bit machine. A 16 bit instruction set is introduced along with an assembler and debugger.
Prerequisite: EMF 235 (C or better)

EMF 237 Microprocessors IV (1.5-1) 2 Hours
Introduces C programming. The basic ideas of the C Language are used to show operating system interfaces and control applications. The basics of compilers are given along with the sue of disks and files.
Prerequisite: EMF 236 (C or better)

EMF 238 Electronics Communications Systems I (1.5-1) 2 Hours
Introduces the concepts of communications electronic systems. Modulation and detection techniques associated with amplitude modulation and single sideband are covered. Propagation, antenna characteristics and transmission line behavior are included.
Prerequisite: EMF 231 (C or better) and EMF 233 (C or better)

EMF 239 Electronics Communications Systems II (1.5-1) 2 Hours
Continues the study of communications electronic systems by analyzing frequency modulation and detection techniques. Digital modulation techniques such as FSK, PSK and QAM are also covered. Microwave, satellite and fiber optic systems are also introduced.
Prerequisite: EMF 238 (C or better)

EMF 250 Linear Devices III (1.5-1) 2 Hours
Studies more advanced solid state device circuits. Frequency response, operational amplifier configurations and tuned amplifiers are covered. Oscillator fundamentals and troubleshooting techniques to the component level are examples of the practical emphasis within the course.
Prerequisite: EMF 233 (C or better)

EMF 251 Linear Devices IV (1.5-1) 2 Hours
Continues the study of advanced topics in solid state systems. Schmitt trigger circuits, thyristors, photoconductor devices, and voltage regulators are a few of the circuits which are analyzed.
Prerequisite: EMF 250

EMERGENCY MEDICAL TECHNICIAN (EMT)

Biology and Health Sciences Division,
Room C140, (847) 543-2042

EMT 111 Emergency Medical Technology-Basic (5-4) 7 Hours
This course prepares students to take the licensure examination of the Illinois Department of Public Health to become an EMT-B. This is a course of instruction in basic emergency medical services as prescribed by the State of Illinois and includes classroom instruction, practical demonstrations and testing, and clinical experience in a hospital emergency department. The emergency services system, the responsibilities of emergency services personnel, and professionalism will be included, as well as assessment, stabilization, and initial pre-hospital medical treatment of injured and ill patients. The course is offered at associated hospitals and fire departments in Lake County.
Prerequisite: High school diploma or GED and 18 years of age or older (at the time of licensure)
Corequisite: Current CPR certification (Health Care Provider Level: American Heart Association or American Red Cross)

EMT 113 Emergency Medical Technician-Paramedic (10-3) 11 Hours
This course prepares students to take the licensure examination of the Illinois Department of Public Health to become an EMT-Paramedic. The course consists of classroom instruction and practical skills demonstrations and testing. Topics include the role of the paramedic, medical/legal issues, care and treatment of victims, documentation, and communications. The course is offered at associated hospitals in Lake County.
NOTE: Student must provide a copy of a written agreement for field experience with an ALS agency and documentation of liability insurance.
Prerequisite: Current Illinois licensure as an EMT-B or EMT-I
Corequisite: EMT 114 and EMT 115 and current CPR certification (Health Care Provider Level: American Heart Association or American Red Cross)

EMT 114 EMT Paramedic Clinical Practicum (1-10) 2 Hours
This course consists of 140 hours of supervised, in-hospital, clinical experience, which includes the emergency department, intensive care units, labor and delivery, pediatrics, surgery, respiratory therapy, cardiac catheterization, and autopsy observation. The course is offered at associated hospitals in Lake County.
Corequisite: EMT 113 and EMT 115

EMT 115 EMT Paramedic Field Experience Practicum (1-10) 2 Hours
This course consists of supervised ambulance, pre-hospital, patient care experience, which includes basic and advanced life support, observation and participation in patient assessment, management immobilization, transport with ongoing assessment and treatment, and communication skills. Students are required to participate in a specific number of calls and/or hours on duty, depending on the agency, which may require more than the listed number of clinic hours. The course is offered at associated hospitals in Lake County.
Corequisites: EMT 113 and EMT 114

ENGINEERING (EGR)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

EGR 102 Introduction to Engineering (3-0) 3 Hours
Foundation course for those pursuing professional goals relating to engineering. Includes a survey of the engineering fields, associated technical disciplines and professional ethics. Analytical and critical thinking skills are emphasized. Engineering problem solving, dimensional analysis, unit conversion, metrics, estimation and design processes are topics covered.
NOTE: Proficiency in basic algebra is strongly recommended.

EGR 115 Applied Mechanics-Statics (3-0) 3 Hours
Analysis of forces on structural and mechanical systems: resultants of force systems; algebraic and graphical conditions of equilibrium of forces systems; analysis of forces acting on members of frames, trusses, etc.; forces due to friction and properties of areas.
NOTE: Prior completion of Technical Mathematics I (MTH 117 or higher) and one semester of College Physics (PHY 121 or higher) is strongly recommended.
Offered spring only.

EGR 121 Engineering Graphics (2-3) 3 Hours
Graphical language used by engineers, designers and drafters to communicate technical ideas in the context of the engineering design/manufacturing process in industry. A course covering topics such as technical sketching, measurement/scaling, geometric constructions, multi-view/working drawings, auxiliary projection, pictorials, solid modeling and descriptive geometry. The use of CAD is emphasized throughout the course.
NOTE: Prior completion of geometry or a high school drafting class is strongly recommended.
Course fee

EGR 122 Descriptive Geometry (2-3) 3 Hours
Graphic representation and solution of spatial problems involving points, lines, planes, intersections, revolutions and developments. Student must furnish basic required equipment.
NOTE: Prior completion of engineering graphics (EGR 121) or equivalent is strongly recommended.
Course fee
Offered spring only.

EGR 215 Mechanics of Materials for Technology (2-2) 3 Hours
Mechanical and physical properties of materials appropriate to the design of engineered structures including frames, machines and buildings. Analysis and design of structural joints, torsional shafts, beams and columns. Analysis of structures with combined loading.
Prerequisite: EGR 115
Course fee
Offered fall only.

EGR 221 Statics and Dynamics (5-0) 5 Hours
Vector mechanics for engineering transfer students including static analysis of force systems acting on trusses, frames, machines, etc. proceeding to particle and rigid body kinematics and kinetics with force mass, acceleration, work, energy, impulse and momentum considerations. Application to engineering structures and mechanical systems emphasized.
Prerequisite: PHY 123
Corequisite: MTH 246
Offered spring only.

EGR 222 Engineering Mechanics of Materials (3-0) 3 Hours
An engineering study of the elementary mechanics of deformable bodies. The course includes analysis of: the elastic and inelastic relationships between external forces acting on engineering structures and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; buckling (columns) combined stresses; repeated loads (fatigue); energy loads and impact; and influences of the properties of materials.
Prerequisite: EGR 221
Offered summer only.

EGR 260 Introduction to Circuit Analysis (3-2) 4 Hours
Circuit analysis at the engineering level. Includes all of the standard analysis tools such as nodal analysis, mesh analysis, Thevenin's and Norton's theorems and superposition. Impedances are defined and AC steady state analysis is carried out as well as analysis of transients in simple circuits. LaPlace transform analysis is introduced as are bode plots and transfer functions. The course will also cover three phase circuits and transformers. Operational amplifiers are also introduced.
Prerequisite: MTH 246 and PHY 124
Corequisite: MTH 227
Offered spring only.

ENGLISH (ENG)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

ENG 90 ESL Academic Purposes Advanced I (3-0) 3 Hours
A course in advanced English as a second language for students wishing to pursue academic studies in American colleges and universities. Students will improve their reading, writing, speaking, and listening while focusing on a chosen content area. Emphasis on recognizing and expressing the relationship between generalizations and supporting details.
NOTE: This course does not apply to any associate degree or career certificate.

ENG 91 ESL Academic Purposes Advanced II (3-0) 3 Hours
A course in advanced English as a second language for students wishing to pursue academic studies in American colleges and universities. Students will improve their reading, writing, speaking and listening while focusing on a chosen content area. Emphasis on further practice in producing and recognizing the relationship between generalizations and supporting details in academic discourse.
NOTE: This course does not apply to any associate degree or career certificate.
Prerequisite: ENG 090

ENG 92 ESL Academic Purposes Advanced III (3-0) 3 Hours
A course in advanced English as a second language for students wishing to pursue academic studies in American colleges and universities. Students will improve their reading, writing, speaking and listening while focusing on a chosen content area. Emphasis on stating and recognizing advantages and disadvantages on a given topic.
NOTE: This course does not apply to any associate degree or career certificate.
Prerequisite: ENG 091

ENG 93 ESL Academic Purposes Advanced IV (3-0) 3 Hours
A course in advanced English as a second language for students wishing to pursue academic studies in reading, writing, speaking and listening while focusing on a chosen content area. Emphasis on stating and recognizing advantages and disadvantages on a given topic and developing support for those opinions.
NOTE: This course does not apply to any associate degree or career certificate.
Prerequisite: ENG 092

ENG 94 ESL Academic Purposes-Transitional Level I (3-0) 3 Hours
A course in transitional intensive ESL for students simultaneously pursuing academic studies in the college. Students will improve their reading, writing, speaking and listening while focusing on a chosen content area. Emphasis is on listening and comprehending academic lectures, recognizing academic discourse markers both in speech and writing and reading and summarizing academic texts.
NOTE: This course does not apply to any associate degree or career certificate.
Prerequisite: ENG 093

ENG 95 ESL Academic Purposes-Transitional Level II (3-0) 3 Hours
A course in transitional intensive ESL for students simultaneously pursuing academic studies in the college. Students will improve their reading, writing, speaking and listening while focusing on a chosen content area. Emphasis is on listening and comprehending academic lectures, notetaking of academic lectures and of academic readings and writing short papers based on readings and lectures.
NOTE: This course does not apply to any associate degree or career certificate.
Prerequisite: ENG 094

ENG 96 ESL Academic Purposes-Transitional Level III (3-0) 3 Hours
A course in transitional intensive ESL for students simultaneously pursuing academic studies in the college. Students will improve their reading, writing, speaking and listening while focusing on a chosen content area. Emphasis is on leading and participating in class discussions, reading and synthesizing materials from different sources and writing academic papers.
NOTE: This course does not apply to any associate degree or career certificate.
Prerequisite: ENG 095

ENG 102 Spelling (1-0) 1 Hour
English 102 (spelling) is a practical module designed to teach students how to spell the 520 most commonly misspelled words in Standard English. Instruction is self-paced and self-scheduled utilizing both a workbook and cassette tapes. Students are tested on words from each chapter through taped tests in the Testing Center. The emphasis is on learning basic rules governing English spelling and correct pronunciation of the words presented.
NOTE: This course does not apply to any associate degree or career certificate.
May be taken four times for credit

ENG 103 Vocabulary Development (1-0) 1 Hour
English 103 is a module designed for students who wish to increase their vocabulary and who have problems decoding words, and expressing themselves clearly. Emphasis is placed on contextual and structural word attack skills and efficient methods of learning new vocabulary and dictionary usage.
NOTE: This course does not apply to any associate degree or career certificate.
May be taken four times for credit

ENG 104 Punctuation and Sentence Structure (1-0) 1 Hour
English 104 is a module designed to help students write stronger sentences and use punctuation marks correctly. Instruction is self-paced and self-scheduled. Students will work on a grammar workbook and will take short objective tests on material covered in the text. In addition, students will complete five short writing assignments in a journal to help them apply the principles of grammar and punctuation they are studying. Students will revise two journal entries for evaluation.
NOTE: This course does not apply to any associate degree or career certificate.
May be taken four times for credit

ENG 105 Introduction to College Writing (3-0) 3 Hours
The goal is to enable students to gain confidence in their ability to clearly communicate facts, ideas and feelings in complete sentences, organized paragraphs and essays.
NOTE: This course does not apply to any associate degree or career certificate.
May be taken four times for credit

ENG 106 Punctuation for Business English (0-2) 1 Hour
This course is a module for students who need practice in the correct transcription of numbers and abbreviations, capitalization, word division, and punctuation.
NOTE: This course does not apply to any associate degree or career certificate.
May be taken four times for credit

ENG 107 Introduction to College Reading I (3-0) 3 Hours
This first level reading course is recommended for students who need to improve basic word analysis and comprehension skills. Areas of concentration include vocabulary development, dictionary skills, skimming/scanning and paragraph analysis.
NOTE: This course does not apply to any associate degree or career certificate.
May be taken four times for credit

ENG 108 Strategic Reading and Writing I (6-0) 6 Hours
A developmental course designed to enable students to gain confidence in their ability to read and write effectively.
May be taken four times for credit

ENG 109 Strategic Reading and Writing II (3-0) 3 Hours
A developmental course designed to enable students to gain confidence in using reading/writing strategies within the context of thematic units.
May be taken four times for credit

ENG 113 Technical Communication Practicum (3-0) 3 Hours
Technical Communication Practicum provides work simulation experience in a variety of writing areas according to the student's major occupational area. The purpose of the course is to allow development and evaluation of writing assignments taken from the student's supervised experiences to on-the-job simulation with the responsibilities of the technical writer.
Prerequisite: ENG 126

ENG 120 Technical Composition I (3-0) 3 Hours
A beginning college level writing course for students and professionals in business and industry representing such fields as accounting, data processing, industrial technology, electronics, medical technology and the biological/health sciences. Emphasis is on writing with conciseness, precision and objectivity. Specifically covered are business letters, memoranda, periodic reports, descriptions of mechanisms and processes, instructions and proposals. A variety of business and technical communication projects are completed, all based on practical situations in the students' fields of study. Graphic elements are introduced as essential to technical documents. Unit on publishing technology.
Prerequisite: Language Proficiency

ENG 121 English Composition I (3-0) 3 Hours
English Composition I is designed to help students develop their competence in writing and analytical reading so they can enter the dialogue of the academic community. Students completing this course should be able to read, analyze, and produce college level texts.
Prerequisite: Language Proficiency
IAI: C1 900

ENG 122 English Composition II (3-0) 3 Hours
English Composition II is designed to further the work done in Composition 120 or 121 by giving students more experience as writers and readers with various purposes in different contexts. Students will write analytical, research, and other advanced papers based on sources from literature and other texts.
Prerequisite: ENG 120 or ENG 121
IAI: C1 901R

ENG 123 Mass Communications (3-0) 3 Hours
Mass Communications traces the development of the mass media from ancient times to the present, with emphasis on the unique evolution of mass media in the United States. Studies will center on current industry practices and issues, current social concerns with the media, and brief overviews of operations in the newspaper, book, magazine, advertising, television, radio, film, public relations, computer and international communications fields.
Prerequisite: Language Proficiency

ENG 124 Newswriting I (3-0) 3 Hours
Newswriting is a course designed to develop skills in gathering, analyzing, organizing, writing and editing basic hard news stories. Course work includes practice in notetaking, interviewing, editing and research skills. Lab work includes writing about simulated news situations such as accidents, fires, press conferences, speeches, meetings, court proceedings and sports. We'll also see how to cover press release rewrites, obituaries, follow ups, science, consumer and business news. At the end of the course, we'll look at the special skills needed in broadcast and investigative reporting; we'll finish by examining journalism's contemporary standards in areas of press law and ethics.
Prerequisite: Language Proficiency

ENG 126 Advanced Composition: Scientific and Technical Communications (3-0) 3 Hours
Designed for students pursuing A. S. degrees, this is a transferable advanced composition course which stresses the writing process: prewriting, drafting and revising. Writing concisely, precisely and clearly for a variety of purposes and audiences. Students in scientific and technical majors will benefit from this course, which will emphasize writing a multi-source research paper including proper documentation, primary and secondary sources including interviews, periodicals, books, and field research. Also covered will be writing scientific and technical reports, writing abstracts and summaries of magazine articles, writing letters, proposals, resumes, instructions, descriptions, etc. This course examines the scientific and technical discourse communities and helps students to read, write and think critically about a variety of issues including the environment, and the ethics of new technology. Developing a mature and professional writing style for an informed audience and a general audience using appropriate formats for effective presentation are covered.
Prerequisite: ENG 120 or ENG 121
IAI: C1 901R

ENG 128 Linguistics and Society (3-0) 3 Hours
This course will introduce students to some of the important principles of linguistics, as well as to the complex nature of language acquisition and use within any given society. The course will discuss how languages resemble and differ from each other, the social and psychological processes involved when individuals learn languages, the interrelation between language and gender and language and ethnicity and the social and political ramifications of different language attitudes; in addition, the course will examine the communicative and social significance of different speech acts.

ENG 129 Women in Literature (3-0) 3 Hours
Introduces students to the wealth of (mostly Western) literature by and/or about women. Discussion of readings, films and other media enables students to analyze the portrayal of women in literature, to trace the historic development of writing by women, and to enjoy the excellence and variety of works by and about women.
Prerequisite: ENG 120 or ENG 121
IAI: H3 911D

ENG 220 Introduction to Scriptwriting for Video, TV and Film (3-0) 3 Hours
Scriptwriting will introduce students to the concepts, structure and format needed to develop shooting scripts for non-broadcast media, TV, and film. The course will examine how to develop realistic characters, conflict, and plot structure. Video tapes and one feature film will be used.
Prerequisite: ENG 121

ENG 222 Creative Writing (3-0) 3 Hours
Creative Writing teaches students to analyze professional poetry and short stories and guides them in the practice of writing both short stories and poetry. The course emphasizes creative expression and class critiques of student writing.
Prerequisite: ENG 121

ENG 223 Survey of Major American Writers (3-0) 3 Hours
In this course students will read and study selected writings of a number of major American writers from the colonial period up to 1900.
Prerequisite: ENG 120 or ENG 121
IAI: H3 914

ENG 224 Creative Writing II (3-0) 3 Hours
Creative Writing II will emphasize the application of concepts presented in the first semester course in a workshop format. Class sessions will use the discussion of student and professional writing as the point of departure for an in-depth study of prosody and the formal elements of fiction. Individual conferences will supplement lectures and workshops to afford students a detailed response to their writing.

ENG 225 Major Trends and Authors of English Literature (3-0) 3 Hours
This course introduces students to the authors who have most influenced the literature of English speakers. From the first English epic to the poems and prose of the nineteenth century, the works covered reflect the major artistic developments of Western society and provide the background to modern writing in the English language.
Prerequisite: ENG 120 or ENG 121
IAI: H3 912

ENG 226 Modern English Literature (3-0) 3 Hours
Modern and contemporary authors of English literature and their background. The seeds of modernism in the nineteenth century, its height of influence and contemporary reactions will be traced in the works which have shaped writing today. The literature will be analyzed as a reflection of the changes that have marked human society, values and history. Examines such themes as the growing alienation of human beings in the machine age and the political and class upheavals of the twentieth century.
Prerequisite: ENG 120 or ENG 121
IAI: H3 913

ENG 227 Introduction to Shakespeare (3-0) 3 Hours
Introduction to Shakespeare offers an examination of the writer's works and their historical and literary background through readings and discussions of selected comedies, histories and tragedies. Videotapes of performances will be shown in class.
Prerequisite: ENG 120 or ENG 121
IAI: H3 90

ENG 228 World Literature (3-0) 3 Hours
World Literature studies representative writers of European, Asian, African, Middle Eastern, and Latin American literature. It surveys the classics and the influential works of various countries, periods and movements from ancient writings to the present. Omitted or represented sparingly are British and North American writers since other courses focus on them. Explore the world by exploring the world's literature.
Prerequisite: ENG 120 or ENG 121
IAI: H3 906

ENG 229 Twentieth Century American Literature (3-0) 3 Hours
American literature from end of World War I to the present. Short stories, plays, poetry and novels representing major writers and trends.
Prerequisite: ENG 120 or ENG 121
IAI: H3 915

ENG 241 Introduction to Poetry (3-0) 3 Hours
The course is designed to introduce students to a wide variety of English and American poetry, both traditional and modern. Emphasis will be on the relationship between meaning and form in individual poems, and class discussion will allow for student analysis, interpretation and critical evaluation.
Prerequisite: ENG 120 or ENG 121
IAI: H3 903

ENG 243 Introduction to Fiction (3-0) 3 Hours
The course is designed to introduce students to a wide variety of English, American, and Continental short stories, both traditional and modern. At least two longer short stories will be read, and at least one novel will be selected later in the course. Emphasis will be on the relationship between meaning and form in individual stories and the novel, and class discussion will allow for student analysis, interpretation and critical evaluation.
Prerequisite: ENG 120 or ENG 121
IAI: H3 901

ENG 244 Mythology and Fairy Tales (3-0) 3 Hours
Students study myths, legends, and fairy tales from various cultures, with emphasis placed on Greek, Norse, and Hindu mythology and Grimm's fairy tales. The lasting power and influence of mythological themes and archetypal symbolism will be explored.
Prerequisite: ENG 120 or ENG 121
IAI: H9 901

ENG 246 Latin American Writers (3-0) 3 Hours
This course will introduce students to significant Latin American writers. The course will draw upon contemporary poetry, short fiction, novels and memoirs in English. The assigned readings will be in English and will exemplify trends in Latin American literature throughout the world.
Prerequisite: Language Proficiency
IAI: H3 908N

ENG 247 International Women Writers (3-0) 3 Hours
Reading literature is one of the most enjoyable ways to find out about other people and places. This introductory course offers CLC students an opportunity to enhance their understanding of various cultures and their appreciation of the literary contributions of women writers outside of the United States, Britain, and Europe. Modern novels and stories combined with ancient to modern poems will give students windows to view the concerns, triumphs, dreams, politics, families, etc. of international culture.
Prerequisite: ENG 120 or ENG 121
IAI: H3 911D

ENG 249 Children and Young Adult Media (3-0) 3 Hours
Selection and evaluation of print and non-print materials, with emphasis on literature, how-to components on program design, story telling. Field observation of skillful school and public library personnel with children will be arranged.
Prerequisite: ENG 120 or ENG 121

ENG 261 Methods for Teaching English as a Second Language (3-0) 3 Hours
This course will provide an overview of some of the major techniques and principles in teaching English as a second or foreign language. In addition, the course will discuss issues related to needs assessment, syllabus design, selection and evaluation of course materials, materials development, assessment tools, and action-research.
Prerequisite: Language Proficiency

ENG 262 Theories of Teaching English as a Second Language (3-0) 3 Hours
This course will introduce the prominent theories of second language acquisition and teaching with a special emphasis on English as a second language. In addition, the course will discuss the relationship between theory and practice and of the relevance of theory to the language classroom.
Prerequisite: Language Proficiency

ENG 263 Early American Minority Writers (3-0) 3 Hours
This course introduces students to the wealth of literature contributed by minority writers before 1920. For this course, minority will be defined as groups who have not traditionally been represented in the American Literary Canon. Such groups include, but shall not be limited to, African Americans, American Indians, Asian Americans, Hispanic/Latino Americans, working class Americans, and gay/lesbian Americans. All forms of literature will be covered--folk tales, poetry, short stories, novels, plays, autobiographies, memoirs, and oral forms.
Prerequisite: ENG 121

ENG 264 Modern American Minority Writers (3-0) 3 Hours
This course introduces students to the wealth of literature contributed by minority writers after 1920. For this course, minority will be defined as groups who have not traditionally been represented in the American Literary Canon. Such groups include, but shall not be limited to, African Americans, American Indians, Asian Americans, Hispanic/Latino Americans, working class Americans, and gay/lesbian Americans. All forms of literature will be covered--folktales, poetry, short stories, novels, plays, autobiographies, memoirs, and oral forms.
Prerequisite: ENG 121

ENG 266 Professional Communication (3-0) 3 Hours
Professional Communication is a sophomore-level course designed for students who have completed their composition requirements and are interested in furthering their writing skills for a variety of purposes. Students will learn about technical writing, writing for publication, writing magazine articles, writing company newsletters, doing research in the sciences and social sciences, writing in the professions, writing reports for industry, the impact of technology on writing and publishing, document design, writing computer manuals and online documentation.
Prerequisite: ENG 121 or ENG 126

ENGLISH AS A SECOND LANGUAGE (ESL)

Community Education and Economic Development Division, Building 4, (847) 543-2021

ENGLISH AS A SECOND LANGUAGE (ESL) classes are offered to adults from all countries whose native language is not English to pursue language instruction.

ESL courses do not apply to any associate degree or career certificate.

Students enrolling in college level instruction and students entering the college on F1 visas are not eligible for tuition free adult education classes.

ESL 30 Beginning English as a Second Language I (3-0) 3 Hours
This course is intended for students with no proficiency in English and/or very low literacy skills in their native language.
Course fee
May be taken four times for credit

ESL 31 Beginning English as a Second Language II (3-0) 3 Hours
This course is a continuation of ESL 030 (Beginning ESL I). It is intended for students with no proficiency in English and/or very low literacy skills in their native language. This course will enable students to master the "survival" vocabulary most commonly encountered in their everyday life, and prepare them more adequately for ESL 040 (Beginning ESL).
Course fee
May be taken four times for credit

ESL 40 Beginning English as a Second Language III (Variable) 1-3 Hours
This course is for students who have little or no knowledge of English. Students will learn to speak, read and write using present progressive, future and imperative verb forms. They will be able to use singular and plural nouns, pronouns, prepositions of place, possessives, time adverbs and descriptive adjectives. They will acquire basic vocabulary to describe themselves and their environment.
Course fee
May be taken four times for credit

ESL 41 Beginning English as a Second Language IV (3-0) 3 Hours
This course, a continuation of Beginning ESL III, is for students who have little or no knowledge of English. Students will learn how to ask and answer basic information questions about themselves. They will practice using "be" and action verbs in several tenses. They will increase their vocabulary in the areas of occupations, places in the community, common actions, adjective opposites and family relationships. They will read short passages and write sentences using these structures and vocabulary items.
Course fee
May be taken four times for credit

ESL 42 Beginning English as a Second Language V (3-0) 3 Hours
This course is for students who have little knowledge of English. Students will learn to speak, read, and write using negative statements in present and future tenses, auxiliary verbs "can" and "have to", clothing vocabulary, colors, countries, nationality and languages, and why/because questions. They will concentrate on listening and speaking skills, with additional work on reading and writing.
Course fee
May be taken four times for credit

ESL 43 Beginning English as a Second Language VI (3-0) 3 Hours
This course, a continuation of Beginning ESL V, is for students who have little knowledge of English. Students will strengthen their use of present and future tense verbs and begin learning to use the past tense. They will learn common regular and irregular verbs. They will acquire vocabulary in the areas of parts of the body, aches and pains, symptoms, and time problems and giving excuses. Listening and speaking will be stressed with additional work on reading and writing.
Course fee
May be taken four times for credit

ESL 44 English as a Second Language - Writing Improvement I (Variable) 1.5-3 Hours
This course is for English-as-a-Second Language students from the upper beginning to the advanced level who want to write better in English. Students will learn spelling rules and work on improving their vocabulary, sentence structure and paragraph organization.
Course fee
May be taken four times for credit

ESL 45 English as a Second Language - Conversation I (Variable) 1.5-3 Hours
This course is for English-as-a-Second Language students who already know some English grammar and have some knowledge of vocabulary but wish to improve their ability to speak and understand English in various social and business situations. American slang and usage will be taught.
Course fee
May be taken four times for credit

ESL 50 Intermediate English as a Second Language I (Variable) 1-3 Hours
This course is for students who can already speak and write in the present and future and can describe themselves in their environment using basic vocabulary and structures. Students will learn to use regular and irregular past and present perfect verbs. They will practice communicating using infinitives, direct and indirect objects, comparative adjectives and more extensive vocabulary.
Course fee
May be taken four times for credit

ESL 51 Intermediate English as a Second Language II (3-0) 3 Hours
This course, a continuation of Intermediate ESL I, is for students who know some English and who can speak and write using present and future tenses and basic vocabulary and structures. Students will work intensively on mastering verb use and learning irregular verb forms. Past tense will be reviewed and past continuous introduced. Students will also learn to use direct and indirect objects correctly and to use quantity words with nouns. Vocabulary areas will include weather, reading maps and giving directions, and giving compliments.
Course fee
May be taken four times for credit

ESL 52 Intermediate English as a Second Language III (3-0) 3 Hours
This course is for students who already know some English and who can speak and write using present and future tenses and basic vocabulary and structures. Students will learn correct use of intensifiers, reflexive pronouns, negative words and comparative adverbs. They will learn the future tense of auxiliary verbs and gain vocabulary knowledge in the areas of accidents and emergencies, polite excuses, customer complaints and the automobile.
Course fee
May be taken four times for credit

ESL 53 Intermediate English as a Second Language IV (3-0) 3 Hours
This course, a continuation of Intermediate ESL III, is for students who already know some English and who can speak, read, and write using present, past and future tenses and basic vocabulary and structures. Students will work intensively on correct formation and use of the present perfect tense, present perfect continuous, and future continuous verb phrases. They will learn the superlative form of common adjectives. They will learn vocabulary for giving information at a medical check-up and for restaurant conversations.
Course fee
May be taken four times for credit

ESL 54 English as a Second Language - Writing Improvement II (Variable) 1.5-3 Hours
This course is for English-as-a-Second Language students from the mid-intermediate to the advanced level who want to write better in English. Students will learn to write more complex sentences, to use more appropriate vocabulary for particular writing tasks and to compose well-developed paragraphs and longer compositions.
Course fee
May be taken four times for credit

ESL 55 English as a Second Language - Conversation II (Variable) 1.5-3 Hours
This course is for English-as-a-Second Language students at the upper intermediate and advanced level who are already familiar with English grammar and vocabulary items but wish to improve their ability to speak and understand English in various social and business situations. American slang and usage will be taught.
Course fee
May be taken four times for credit

ESL 60 Advanced English as a Second Language I (Variable) 1-3 Hours
This course is for non-native speakers who are familiar with many of the essential grammatical structures and most verb tenses but need further skills in English. Students in this class will strengthen and refine their use of structures learned previously. They will learn to use passive voice, superlative adjectives and more specific vocabulary. They will become familiar with American slang, idioms and cultural patterns.
Course fee
May be taken four times for credit

ESL 61 Advanced English as a Second Language II (3-0) 3 Hours
This is a continuation of Advanced ESL I for non-native speakers who are familiar with many of the essential grammatical structures and most verb tenses but need further skill in English. Students will strengthen and refine their control of structures learned previously. They will learn to use all verb tenses more accurately. They will improve their mastery of English prepositions and two-word verbs. Aural comprehension of dialogs at normal speed will be emphasized.
Course fee
May be taken four times for credit

ESL 62 Advanced English as a Second Language III (3-0) 3 Hours
This course is for non-native speakers of English who are familiar with many of the essential grammatical structures and most verb tenses but need further skill in English. Students will strengthen and refine their control of structures learned previously. They will focus on accurate use of verb phrases, relative clauses and subject-verb agreement in speech and in writing. Listening comprehension and paragraph writing will also be stressed.
Course fee
May be taken four times for credit

ESL 63 Advanced English as a Second Language IV (3-0) 3 Hours
This course, a continuation of Advanced ESL III, is for non-native speakers who are familiar with many of the essential grammatical structures and most verb tenses but need further skill in English. Students will strengthen and refine their control of structures learned previously. They will learn to use adverb clauses of time, cause, condition, result and comparison. They will work intensively on increasing their vocabulary and on learning to recognize prefixes and suffixes. They will work in reading on identifying main ideas and supporting details.
Course fee
May be taken four times for credit

ESL 70 English as a Second Language Study Skills I (Variable) 1-3 Hours
This class is for students who have achieved communicative competence but wish to refine listening, speaking, reading and writing skills. They will learn content in advanced areas relating to the writing skills GED test.
Course fee
May be taken four times for credit

ESL 71 English as a Second Language Study Skills II (Variable) 1-3 Hours
This class is for students who have achieved communicative competence but wish to refine listening, speaking, reading, and writing skills. They will learn content in advanced areas relating to the GED reading test.
Course fee
May be taken four times for credit

ESL 72 English as a Second Language Reading And Writing Skills (3-0) 3 Hours
This class is for students who are already able to communicate in English but wish to upgrade their reading and writing skills for educational, business or personal reasons. Students will improve their reading comprehension, expand their vocabulary, learn to make inferences and scan for information and learn to write more correct and complex sentences, paragraphs and longer compositions.
Course fee
May be taken four times for credit

ESL 73 English as a Second Language Speaking and Listening Skills (3-0) 3 Hours
This course is for students who are already able to communicate in English but wish to improve their listening and speaking skills for business, educational or personal reasons. Students will learn to listen carefully, take notes and outline oral presentations, increase their speaking vocabulary and practice speaking in both informal discussions and more structured situations.
Course fee
May be taken four times for credit

ESL 80 English as a Second Language Academic Purposes Intermediate I (3-0) 3 Hours
This is the first portion of a course in intermediate English as a Second Language for students wishing to pursue academic studies in American colleges and universities. Students will improve their reading, writing, speaking and listening while focusing on a chosen content area. Emphasis will be on directions and sequencing in academic contexts.
Course fee

ESL 81 English as a Second Language Academic Purposes Intermediate II (3-0) 3 Hours
The second portion of a course in intermediate English as a Second Language is for students wishing to pursue academic studies in American colleges and universities. Students will improve their reading, writing, speaking and listening while focusing on a chosen content area introduced in English as a Second Language for Academic Purposes - Intermediate I. Emphasis will focus on series of directions and sequencing in academic contexts.
Course fee

ESL 82 English as a Second Language Academic Purposes Intermediate III (3-0) 3 Hours
The third portion of a course in intermediate English as a Second Language is for students wishing to pursue academic studies in American colleges and universities. Students will improve their reading, writing, speaking and listeningwhile focusing on a chosen content area. Emphasis will be on American life and college academic culture.
Course fee

ESL 83 English as a Second Language Academic Purposes Intermediate IV (3-0) 3 Hours
This fourth portion of a course in intermediate English as a Second Language is for students wishing to pursue academic studies in American colleges and universities. Students will improve their reading, writing, speaking and listening while focusing on a chosen content area chosen in English as a Second Language for Academic Purposes-Intermediate III. Emphasis will focus on expressing comparisons.
Course fee

FIRE SCIENCE TECHNOLOGY (FST)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

FST 111 Introduction to Fire Service (3-0) 3 Hours
An introductory course which discusses the history and philosophy of the fire service. Overviews all aspects of fire science technology; fire fighting, emergency medical, underwater rescue, hazardous materials, public education, fire investigations, and fire prevention. Major emphasis on orientation for people who are considering involvement in the fire service. Field trips are scheduled for the course.
NOTE: Individuals with greater than one year firefighter experience are not eligible for credit. Student orientation and pre-scheduled classroom meetings required.
Prerequisite: Language and Math Proficiency

FST 116 Fire Fighting Tactics and Strategy I (3-0) 3 Hours
An introduction to the basic principles and methods associated with the strategic and tactical responsibilities of the line officer on the fireground. Emphasizes size-up, fire operations, pre-fire planning, and basic engine and truck company operations. Recognized by the Office of the State Fire Marshal (OSFM) towards Fire Officer 1 & Tactics & Strategy 1.
NOTE: FST 111 and/or one year active experience in the fire service is recommended.

FST 117 Fire Fighting Tactics and Strategy II (3-0) 3 Hours
Continuation of FST 116, with advanced principles and methods associated with fireground strategies and tactics, required of the company officer and chief officer. The course emphasizes multi-company alarm assignments, sectorization of the fireground, handling disasters and major fire incidents. Student participation of assigned fire simulation exercises will be required. Recognized by the Office of the State Fire Marshal toward Fire Officer 2/Tactic & Strategy 2.
Prerequisite: FST 116

FST 118 Incident Command (3-0) 3 Hours
Basic principles for firefighters, company officers and chief officers, for organizing and managing an emergency scene. This course will stress sectorization, scene safety, and scene management. Emergency fire, hazardous materials, underwater rescue and medical scene management will be reviewed.
NOTE: FST 116 and/or 2 years active experience in the fire service is recommended.

FST 119 Fire Apparatus Engineer (3-0) 3 Hours
A classroom and hands on course, designed for personnel who have or may have the responsibility as an apparatus engineer. This subject covers preventive maintenance, pumps and controls, water supply, pump testing, and hydraulics. The course is designed to meet the Office of the State Fire Marshal, and NFPA 1001 requirements, except for driving requirements that must be met by the individual department.

FST 173 Fire Instructor I (3-0) 3 Hours
This course is designed to meet the needs of those individuals who wish to learn the techniques of instructing in the fire service. It is structured to provide basic information about human relations in the classroom environment, methods of teaching, and the proper method of writing lesson plans. Areas covered include: Orientation and description of the instructor's job, roles and responsibilities of the fire service instructor, concepts of learning, human factors in learning, oral communications, methods of instruction, lesson plans, instructional materials, organizing the learning environment, testing and evaluation, records and reports, and practical application. This course is recognized by the office of the Fire Marshal towards certification of Instructor 1 and Officer 1.
NOTE: FST 111 and/or one year active service experience in the fire service is recommended.

FST 174 Fire Instructor II (3-0) 3 Hours
This course is a continuation of FST 173. Teaches advanced principles and techniques of instruction. This course is structured to provide information about human relationships in the teaching-learning environment, methods of lesson and course development. Materials covered will include performance objectives, instructional materials development, evaluation and references. Recognized by the Office of the State Fire Marshal towards Instructor 2/Officer 2.
Prerequisite: FST 173

FST 177 Fire Prevention Principles I (3-0) 3 Hours
The introductory course for the individual who will be involved in code enforcement. It will include: current laws, codes, ordinances, building construction, occupancies, hazards and causes, inspection techniques and investigations. Recognized by the Office of the State Fire Marshal towards Fire Officer 1/Fire Prevention Principles 1.
NOTE: Student orientation and pre-scheduled classroom meetings required.

FST 192 Hazardous Materials First Responder (3-0) 3 Hours
This course is designed for firefighters and other persons who might encounter Hazardous Materials in the course of their occupations. This course will stress identification, site entry, isolation, evacuation, use of Materials Safety Data sheets, and how to obtain assistance at the hazardous materials scene. Practical applications and hands on experiences are required in this course. The course meets the requirements for Hazardous Materials First Responder Awareness, and Hazardous Materials First Responder Operations, of the State Fire Marshal Certification and OSHA 29 CFR 1910.

FST 215 Fire Inspection Applications (3-0) 3 Hours
Study of public relations and inspection techniques and procedures. Covered are: evaluation of fire hazards, inspection techniques for various types of buildings, procedures for conducting inspections, report and record keeping procedures, various types of fire prevention campaigns, the training of fire inspectors, coordination of activities with other government agencies, arson investigation, and on-the-site field inspections.
Prerequisite: FST 214

FST 217 Fire Officer Communications (3-0) 3 Hours
Techniques of company officer communications and group dynamics. Acquaints the student with the principles of communications and the role of the company officer in both formal and informal communication processes. Recognized by the Office of the State Fire Marshal towards Fire Officer1/ Management2.
NOTE: Student orientation and pre-scheduled classroom meetings required.
Prerequisite: FST 218 or one year active experience in the fire service

FST 218 Fire Officer Supervision (3-0) 3 Hours
Introduction to objectives and techniques of fire company management. Acquaints the student with the role and function of the company officer. Discussion of management theories and practices; includes planning, organizing, staffing, directing and controlling. Recognized by the Office of the State Fire Marshal towards Fire Officer 1/ Management 1.

FST 273 Fire Science Business and Operations (3-0) 3 Hours
The advanced study of management principles and techniques used by mid-level officers. These studies will include: management of resources; personnel, money, facilities, and time; principles of delegation, problem solving and motivation. Recognized by the Office of the State Fire Marshal toward Fire Officer 2/Management 3.
Prerequisite: FST 217 and/or at least two years active experience in the fire service.

FST 274 Fire Administration and the Law (3-0) 3 Hours
Management principles and techniques used by future or current chief officers in the fire service. Acquaints the student to principles of public relations, labor relations, personnel management, and administrative liability, including: criminal and civil liability, disciplinary hearings, avoiding lawsuits, administrative investigations, and State and Federal Regulations. Recognized by the Office of the State Fire Marshal toward Fire Officer 2/Management 4.
Prerequisite: FST 273 and/or least three years active experience in the fire service.

FST 279 Special Topics in the Fire Service (3-0) 3 Hours
This course will take a subject of topical interest such as rescue practices, water supply analysis or reporting systems and cover that subject in depth. Because topics will vary widely from year to year a student may seek approval to repeat this course once for credit.
May be taken twice for credit toward degree

FOOD SERVICE (FSM)

Business Division, Room A142, (847) 543-2041

FSM 110 Introduction to Professional Food Service (3-0) 3 Hours
The history and organization of the food service industry including management structures and staffing requirements for different types of operations. The course focuses on the role and responsibilities of food service personnel and analyzes trends within the industry.

FSM 111 Principles of Food Preparation I (2-4) 4 Hours
Study of the principles of commercial food preparation with emphasis on handling tools, equipment, and materials for sauces, soups, entrees, and vegetables. Includes the study of quality and cost controls and menu planning. Emphasizes the importance of professional kitchen management.
Course fee

FSM 112 Culinary Arts I (1-4) 3 Hours
A professional introduction to a full service kitchen and the uses of tools, materials and equipment. Preparation and presentation of menu, combinations of salads, soups, appetizers, sauces, entrees, vegetables, starches, and desserts are covered.
Corequisite: FSM 111 or FSM 170
Course fee

FSM 113 Applied Food Service Sanitation (1-0) 1 Hour
Principles and procedures of sanitation in food preparation and service. Includes causes and prevention of food borne illnesses. Develops understanding of health regulations and inspection procedures. The State of Illinois Sanitation Licensing Examination is given as part of this course.
NOTE: BRING BOOKS TO FIRST CLASS--AVAILABLE AT CLC BOOKSTORE.

FSM 170 Principles of Food Preparation II (2-4) 4 Hours
Study of the principles of commercial food preparation with emphasis on skill development for the production of bread and pastry, salads, and international cuisine. Includes the principles of purchasing, pricing, scheduling, and catering management
Course fee

FSM 171 Culinary Arts II (1-4) 3 Hours
A required course for students in the Culinary Arts Option. FSM 171 provides expanded experience in the handling of tools, materials and equipment. Experience is provided in the preparation of soups, entrees, salads, and bakeshop in a commercial food service operation.
Corequisite: FSM 111 or FSM 170
Course fee

FSM 175 Nutrition (3-0) 3 Hours
Principles of nutrition with application to the food service industry. Includes fundamentals of food chemistry and nutrition for different age groups and special needs of individuals.

FSM 212 Menus/Merchandising/Facilities Planning (3-0) 3 Hours
A study of factors affecting consumer patronage including menu design, promotional techniques and facilities planning of service and kitchen areas in various types of food service operations.
Prerequisite: Two FSM courses

FSM 213 Quantity Food Purchasing (3-0) 3 Hours
Principles and procedures of quantity purchasing including development of standards, cost controls, budgeting, and record keeping systems for food, beverages, equipment, and supplies. Vendor relations, legal factors, and storage requirements are included.
Prerequisite: One FSM course
Course fee

FSM 271 Food Service Management (3-0) 3 Hours
This course is the capstone for the Food Service Management Option. Students learn to apply the principles and techniques to manage a competitively successful food service operation in a rapidly changing environment. The roles, responsibilities and competencies required to perform successfully are presented. Competencies stressed include planning, leading, organizing and controlling to efficiently deliver quality products and services. Skills in creative problem solving, resume writing, and team building are covered. BASSETT (1 day) course is included.
Prerequisite: Two FSM courses
Course fee

FSM 273 Food, Beverage and Labor Control (3-0) 3 Hours
A primary function that affects the level of success of any food service operation is management's ability to control costs. The course provides the principles and practices of cost control systems for food, beverage, labor and overhead. The course shows how to analyze the numbers to prevent financial disaster or to correct them once they occur. Also, wine and spirit classification and controls will be discussed.
Prerequisite: One FSM course

FSM 299 Selected Topics in Food Service (Variable) 1-4 Hours
A course designed to meet the needs of students for specialized instruction in current Food Service Management/Culinary Arts topics.
NOTE: Topics will be identified for each section of the course.
Course fee
May be taken four times, but any topic only once

FRENCH (FRN)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

FRN 121 Beginning Conversational French I (4-0) 4 Hours
Fundamentals of language necessary for understanding, speaking, reading and writing of French. Practice in pronunciation from dialogues and pattern practices.
Prerequisite: Language Proficiency

FRN 122 Beginning Conversational French II (4-0) 4 Hours
Fundamentals of language necessary for understanding, speaking, reading, and writing of French. Practice in pronunciation from dialogues and pattern practices. This is a continuation of FRN 121.
Prerequisite: FRN 121

FRN 221 Intermediate French I (4-0) 4 Hours
Review and further study of grammar concepts, continued aural-oral practice, simple conversation and selected readings with text analysis.
Prerequisite: FRN 122

FRN 222 Intermediate French II (4-0) 4 Hours
Review and further study of grammar concepts, continued aural-oral practice, simple conversation and selected readings with text analysis.
Prerequisite: FRN 221
IAI: H1 900

FRN 223 French Civilization I (3-0) 3 Hours
Composition and conversation based on contemporary writings emphasizing the social, political, economic and literary trends of modern France.
Prerequisite: FRN 222
IAI: H1 900

FRN 224 French Civilization II (3-0) Hours
Study of France and its people through its language and political institutions as well as major trends in literature and art from the Gallo-Roman area to the present.
Prerequisite: FRN 223
IAI: H1 900

GENERAL EDUCATION DEVELOPMENT (GED)

Community Education and Economic Development Division, Building 4, (847) 543-2021

G.E.D. PREPARATION (GED) classes prepare students to take the high school equivalency exam.

GED courses do not apply to any associate degree or career certificate.

Students enrolling in college level instruction and students entering the college on FI visas are not eligible for tuition free adult education classes.

GED 6 General Educational Development Preparation I (Variable) 1-4 Hours
This course is a preparation for those who want to take the General Educational Development Examination (G.E.D.) to earn their high school equivalency certificate. It is for adults who have not completed high school. Students under age 19 should call 543-2457 for G.E.D. test information. This class is offered in English and Spanish.
Course fee
May be taken four times for credit

GED 7 General Educational Development Preparation II (3-0) 3 Hours
This is a continuation of G.E.D. Preparation I (G.E.D. 006) for those who need further instruction before attempting the General Eduational Development Examination (G.E.D.) to earn their high school equivalency certificate. This course is for adults who have not completed high school.
Course fee
May be taken four times for credit

GEOGRAPHY (GEG)

Social Science Division, Room A244,
(847) 543-2047

GEG 121 Physical Geography (3-0) 3 Hours
Physical Geography is the study of all the processes and agents that help to shape and change the environment in which humans live. Emphasis is placed on the interrelationships that exist between the earth's heat and energy systems and the weather, climate, soils, vegetation, streams, oceans, landforms, and people and their activities.
NOTE: This course meets the physical science non-lab general education requirement.
Prerequisite: Language Proficiency
IAI: P1 909

GEG 122 Cultural Geography (3-0) 3 Hours
Cultural Geography is an introductory survey course that is designed to help students acquire geographic knowledge about human culture, trends and activities. A wide range of current and urgent world concerns, such as, population control, cultural differences, urbanization, economic livelihoods, and state and nation systems, are placed in a human-geographic context. The course will also assist students gain better geographic perceptions on current world affairs.
Prerequisite: Language Proficiency
IAI: S4 900N

GEG 123 World Regional Geography (3-0) 3 Hours
World Regional Geography is an introductory survey course that emphasizes the human and physical geography of the world's major regions. Each region is surveyed as to its location and component countries and peoples, world importance, distinctive physical and cultural characteristics, relations to other areas of the world, and the major problems and potentialities associated with each. Students will gain a better geographic perspective on current affairs and an enhanced appreciation of travel.
Prerequisite: Language Proficiency
IAI: S4 900N

GEG 223 Geography of Latin America (3-0) 3 Hours
This course is a survey of Latin America's cultural, economic, physical, political, and social geographies. It emphasizes problems and potentials of regional development and land use.
Prerequisite: Language Proficiency

GEG 240 Geographic Information Systems I (3-0) 3 Hours
This course is an introduction to the fundamentals of GIS and basic geographic concepts necessary for analyzing and utilizing spatial data. These concepts include map scale, projections, coordinate systems, methods of symbolizing map data, vector versus raster spatial analysis, air photos and satellite imagery in mapping. Uses of GIS discussed will include its applications in mapping, environmental studies, planning, management and business.
Prerequisite: Language Proficiency

GEOLOGY (GEO)

Engineering, Math, Physical Sciences Division,
Room B134, (847) 543-2044

GEO 120 Earth Science (4-0) 4 Hours
Primarily for the non-science major or those who seek a comprehensive overview of the earth and space. Subject material is organized to enable students to understand the relationships between various components of the environment. Topics of study include astronomy, atmosphere and weather, surface and groundwater, and geological processes and agents such as glaciers, wind, volcanoes and landslides.
Prerequisite: Language and Math Proficiency
IAI: P1 905

GEO 121 Physical Geology (3-2) 4 Hours
For those who wish to explore an interest in geology, major in geology, or satisfy lab science requirements. Topics include igneous rocks and volcanism, sedimentary rocks and stratigraphy, metamorphic rocks and metamorphism, weathering, mass wasting, streams, deserts and glaciers. Lab studies concentrate on minerals, rocks and topographic maps.
Prerequisite: Language and Math Proficiency
Course fee
IAI: P1 907L

GEO 122 Historical Geology (3-2) 4 Hours
Primarily for those majoring in geology or those who wish to understand the geologic evolution of North America. Combines a regional and topical approach to continental development, crustal structure, and mountain building. Regional stratigraphy is integrated with the origin and evolution of plants and animals. Lab topics include structural geology, geologic maps, fossils, and a mapping project.
NOTE: A two-day field trip to the Baraboo District of Wisconsin is required. Expenses of the field trip are borne by the student.
Prerequisite: GEO 121
Course fee

GEO 124 Oceanography (3-0) 3 Hours
For the non-science major or those who wish to gain a comprehensive overview of the science of oceanography. Topics include a history of oceanographic investigations; topography, structure, and evolution of the ocean basin; chemical and physical properties of ocean water and water masses; waves; tides; oceanic circulation; shoreline processes; estuaries; marine sediments ;hurricanes; resources; fisheries; and ecology.
Prerequisite: Language and Math Proficiency
IAI: P1 905

GEO 126 Geology of Illinois (2-0) 2 Hours
A survey of the principle aspects of Illinois geology, with emphasis on the landforms, rocks, soil, structure and glacial history of Illinois and parts of adjacent states. Also active geologic processes today, resource development, land and water use and management.
Prerequisite: Language and Math Proficiency

GEO 221 Rocks and Minerals (1-2) 2 Hours
Emphasis on hand specimen identification of minerals and rocks. Introduction to crystallography, occurrence and economic uses of minerals and rocks, natural resources.
Prerequisite: Language and Math Proficiency

GEO 224 Environmental Geology (3-0) 3 Hours
For the non-science major or as a foundation course for those wishing to major in environmental sciences. A critical and objective approach is utilized to evaluate the human interrelationship with geological hazards and problems. Volcanoes, earthquakes, landslides and subsidence, surface and groundwater hydrology, waste disposal, mineral resources, and the energy situation are all included.
Prerequisite: Language and Math Proficiency
IAI: P1 908

GEO 226 Field Geology (2-2) 3 Hours
Introduction to basic geological field methods and application of geological concepts through field studies of selected regions of North America.
NOTE: May include: camping, backpacking, canoeing, and/or hiking, occasionally under rigorous conditions. Travel expenses are paid by the student. Should be considered a general education elective; will NOT meet CLC laboratory science requirement.
Course fee
May be taken twice, but any topic only once

GERMAN (GER)

Communication Arts, Humanities &
Fine Arts Division, Room B237, (847) 543-2040

GER 121 Beginning Conversational German I (4-0) 4 Hours
Fundamentals of language necessary for understanding, speaking, reading and writing of German. Practice in pronunciation from dialogues and pattern practices.
Prerequisite: Language Proficiency

GER 122 Beginning Conversational German II (4-0) 4 Hours
Fundamentals of language necessary for understanding, speaking, reading, and writing of German. Practice in pronunciation from dialogues and pattern practices. This is a continuation of GER 121.
Prerequisite: GER 121

GER 221 Intermediate German I (4-0) 4 Hours
Review and further study of grammar concepts, continued oral practice, simple conversation and selected readings. Laboratory practice encouraged.
Prerequisite: GER 122

GER 222 Intermediate German II (4-0) 4 Hours
This course is the continuation of GER 221. More emphasis is placed on conversation, reading and writing. In this course the student is introduced to the first literary work in German.
Prerequisite: GER 221
IAI: H1 900

GER 223 German Civilization I (3-0) 3 Hours
Composition and conversation based on readings in nineteenth and twentieth century German literature with emphasis on style.
Prerequisite: GER 222
IAI: H1 900

GER 224 German Civilization II (3-0) 3 Hours
Composition and conversation based on readings in nineteenth and twentieth century German literature with emphasis on style. A continuation of German 223.
Prerequisite: GER 223
IAI: H1 900

HEALTH INFORMATION TECHNOLOGY (HIT)

Biological & Health Sciences Division,
Room C140, (847) 543-2042

HIT 111 Medical Terminology (3-0) 3 Hours
Studies the terms related to medical science, hospital services, medical specialties including pathology and radiology, and abbreviations used in medicine. Includes spelling and pronunciation.
Prerequisite: Language Proficiency

HIT 112 Health Care Delivery Systems (2-0) 2 Hours
Current trends in health care delivery are presented including health facilities, medical staff organization and functions, the changing roles of health care professionals, and patterns of financing health care.
Prerequisite: Language Proficiency

HIT 113 Ethical and Legal Aspects of Medical Records (2-0) 2 Hours
Presentation of concepts of law in medicine and health related areas as applied to the medical record. Includes survey of current state and federal law relative to the release of medical information.
Prerequisite: Language Proficiency

HIT 114 Medical Transcription (1-2) 2 Hours
Development of skills in interpreting, editing, and transcribing physician and professional dictation into well-organized reports using medical terminology, effective language, and reference skills.
Prerequisite: AOS 128 or BSS 128 or 35 WPM
Corequisite: HIT 111
Course fee

HIT 115 Health Data Content and Structure (2-2) 3 Hours
Introduction to the health information profession, the health information department, and the health record: its form, content, and analysis. Filing systems are also included. Health records in a variety of settings are reviewed and analyzed: acute care, ambulatory care, home health care, long term care, etc.
Prerequisite: Language Proficiency
Course fee

HIT 116 Advanced Medical Transcription (3-0) 3 Hours
Provides extensive experience in advanced transcription of medical reports. History and physical examination reports, consultation reports, and operative reports are included for a variety of specialty areas such as cardiology, neurology, and gynecology. Students will be expected to transcribe assigned reports with a high level of accuracy and moderate speed that is expected by local employers.
NOTE: In addition to the three scheduled hours of class time, students should plan on spending a minimum of four hours per week in the Health Information Technology lab in order to complete the required reports.
Prerequisite: HIT 114 (C or better)
Corequisite: BIO 111 or BIO 124 (C or better in either)
Course fee

HIT 117 Basic CPT Coding (1-2) 2 Hours
Introduces the theory, structure, and organization of the Current Procedural Terminology (CPT) coding system. Emphasis will be on the application of coding principles to accurately assign CPT codes to health records. The role of CPT codes in billing and reimbursement will be included.
NOTE: Students with health care experience may contact the HIT coordinator if interested in alternative methods of meeting the prerequisite.
Prerequisite: HIT 111 (C or better)
Corequisite: BIO 111 or BIO 124 (C or better in either)
Course fee

HIT 118 Basic ICD-9-CM Coding (1-2) 2 Hours
Introduces the theory, structure, and organization of the International Classification of Diseases-9-Clinical Modification (ICD-9-CM) coding system. Emphasis will be on the application of coding principles to accurately assign ICD-9-CM codes to health records. The role of ICD-9-CM codes in billing and reimbursement will be included.
NOTE: Students with health care experience may contact the HIT coordinator if interested in alternative methods of meeting the prerequisite.
Prerequisite: HIT 111 (C or better)
Corequisite: BIO 111 or BIO 124 (C or better in either)
Course fee

HIT 119 Pharmacology (1-0) 1 Hour
Introduction to pharmacology. Includes terminology, drug category, use, side effects, contraindications, and interactions. Common dosage ranges and routes of administration will also be examined.
Prerequisite: Language Proficiency

HIT 171 Insurance Procedures for the Medical Office (3-0) 3 Hours
Introduces health records and insurance processing procedures in the medical office. Emphasizes the relationship between health information and billing procedures. Brief overviews of diagnostic and procedural coding are included.
Prerequisite: Language Proficiency

HIT 172 Health Statistics and Registries (1-2) 2 Hours
Focuses on the collection and reporting of medical statistical data. The functions and uses of registries, with emphasis on the Cancer Registry, are studied.
Prerequisite: HIT 115 (C or better) and admission to the HIT program
Course fee

HIT 173 Medical Office Procedures (3-0) 3 Hours
Provides students with a foundation of knowledge and skills in the activities performed in the front office of a medical or dental office. Topics include scheduling appointments, telephone techniques, patient education, bookkeeping and banking, maintaining patient records, and managing office medical records.
Prerequisite: Language Proficiency

HIT 174 Clinical Practice in Medical Transcription (0-4) 1 Hour
This course provides students with practical experience in a medical transcription setting. Students will transcribe a variety of medical reports and become familiar with the equipment, workflow and procedures in an actual work setting. The focus will be on developing speed, accuracy, professional demeanor and self-confidence.
Prerequisites: HIT 115, HIT 116 (C or better in both) , BIO 111, AOS 113, and consent of the instructor

HIT 212 Clinical Practice in Health Information I (1-15) 4 Hours
First of a two-semester sequence of supervised clinical experience in health facilities.
NOTE: The student will be responsible for his/her transportation to and from the health facility. The student must be enrolled in the final Fall semester.
Prerequisite: HIT 113, HIT 115, and admission to the HIT program
Corequisite: HIT 271 or HIT 272 (C or better)
Course fee

HIT 213 Clinical Practice in Health Information II (0-8) 2 Hours
Supervised clinical experience in various areas pertaining to health information.
NOTE: The student will be responsible for his/her transportation to and from the health facility.
Prerequisite: HIT 212 (C or better)
Course fee

HIT 214 Organization and Supervision (2-0) 2 Hours
Covers the basic principles of management and supervision as applied to the health information profession.
Prerequisite: HIT 115 (C or better) and admission to the HIT program

HIT 215 Medical Science (2-2) 3 Hours
Covers current theories of disease processes which will assist the student in interpreting information within the medical record.
Prerequisite: HIT 111 (C or better)
Course fee

HIT 217 Health Information Systems and Data Literacy (3-0) 3 Hours
Introduces the application of basic statistical methods to health data, including reliability and validity of data, measures of central tendency, data dispersion, and data presentation. Review of electronic data processing concepts, systems concepts, and computer applications in health care.
Prerequisite: HIT 115 (C or better) and admission to the HIT program
Course fee

HIT 218 Seminar in Health Information Technology (2-0) 2 Hours
Selected problems or topics of interest to health information technology are analyzed and discussed. A literature search is summarized in a written report, and the substance of the study is presented orally.
Corequisite: HIT 213 (C or better)

HIT 219 Quality Management and Performance Improvement (2-0) 2 Hours
Introduces the principles of the quality assessment process and utilization management. Provides a framework for gaining skills in collecting and analyzing data for performance improvement initiatives.
Prerequisite: HIT 115 (C or better) and admission to the HIT program

HIT 271 Advanced Coding (2-0) 2 Hours
This course explores the more complex areas of ICD-9-CM and CPT coding which were introduced in HIT 117 and HIT 118. Students will apply coding principles and guidelines related to complex diagnoses and procedures. Coding from actual patient records is emphasized. The use of coding references and coding software are integrated into the course.
Prerequisites: HIT 117, HIT 118 (C or better in both), and admission into the HIT Program
Corequisite: HIT 215
Course fee

HIT 272 Reimbursement Systems in Healthcare (2-0) 2 Hours
In this course, students will learn the history, rationale, and methodology of the systems used by third-party payers to determine the reimbursement that health care providers will receive. Reimbursement concepts include fee-for-service, managed care, capitation systems, Diagnosis-Related Groups (DRGs), Resource Based Relative Value Scale (RBRVS), Ambulatory Payment Classifications (APCs), and related concepts. The use of the charge description master (chargemaster) in reimbursement will be discussed. The importance of compliance with regulations and the related issues of fraud and abuse will also be addressed.
Prerequisites: HIT 117, HIT 118 (C or better in both), and admission into the HIT Program

HISTORY (HST)

Social Science Division, Room A244,
(847) 543-2047

HST 121 History of Western Civilization I (3-0) 3 Hours
This course is an historical survey of the ancient civilizations of Egypt, Greece, and Rome, through the Middle Ages to the Renaissance. Emphasis is placed on cultural developments, political trends, economic and social issues that have influenced the direction of Western Civilization.
Prerequisite: Language Proficiency
IAI: S2 902

HST 122 History of Western Civilization II (3-0) 3 Hours
This course is an historical survey from absolutist monarchy through the French Revolution, Industrialization, and 20th century ideological conflicts and wars. Emphasis is placed on the shaping of contemporary ideas values, institutions, and the impact of technology.
Prerequisite: Language Proficiency
IAI: S2 903

HST 123 Modern Europe I (3-0) 3 Hours
This course surveys the making of the modern mind and the Age of Revolutions. Emphases are placed on the Age of Reason, French Revolution and growth of modern democracy, liberalism, socialism, and nationalism.
Prerequisite: Language Proficiency

HST 124 Modern Europe II (3-0) 3 Hours
This course surveys Europe with its world impact in the 20th century. Emphases are placed on intellectual modernism, totalitarianism, world wars, ideologies in conflict and global national interaction.
Prerequisite: Language Proficiency

HST 126 History of Contemporary Non-Western Civilization (3-0) 3 Hours
History of Contemporary Non-Western Civilization is a survey of the historical roots and modern history of the following areas: The Far East, Southeast Asia, and the Middle East. The course will include historical origins of the nations covered but will focus on their history from the late 19th century to the present.
Prerequisite: Language Proficiency
IAI: S2 905N

HST 127 History of Chinese Culture and Society (3-0) 3 Hours
This survey course is designed to provide students with an introduction to Chinese culture and society by studying its history, geography, political and economic structures, social organization and cultural institutions.
Prerequisite: Language Proficiency
IAI: S2 914N

HST 129 Women in History (3-0) 3 Hours
This course is an historical and humanistic survey of famous and obscure women from ancient times to the modern world. Its emphases are the status and treatment of women through the ages and factors that have defined and altered this status.
Prerequisite: Language Proficiency

HST 221 United States History to 1876 (3-0) 3 Hours
This course is a survey of American history from the pre-Columbian era to the end of Reconstruction, such as the interpretive survey on the political, constitutional, economic, social and cultural developments in the United States. Also an exploration of the European and African backgrounds, the colonial era, early national period, the era of Jacksonian Democracy, slavery, the Civil War, and Reconstruction.
Prerequisite: Language Proficiency
IAI: S2 900

HST 222 United States History 1876 to Present (3-0) 3 Hours
This course is an interpretative survey of social, economic, political, diplomatic, and cultural developments of United States since 1876 with emphasis on impact of industrialism, urbanization, two world wars, depression, foreign and domestic issues, and post World War II.
Prerequisite: Language Proficiency
IAI: S2 901

HST 223 American Popular Culture (3-0) 3 Hours
American Popular Culture is a survey of 20th century American culture and social history as reflected in popular movies, music, and general popular expression.
Prerequisite: Language Proficiency

HST 225 American Labor History (3-0) 3 Hours
This course is a survey of American labor history from the colonial era to the present. Following a chronological approach the course will cover the development of the system of labor in America, the factors affecting changes in the system, the emergence and growth of labor organizations, the role of labor organizations in the economic and political order, and the challenges confronting labor and labor organizations in a changing economic order.
Prerequisite: Language Proficiency

HST 240 Afro-American History I (3-0) 3 Hours
This course surveys the African origins of African Americans, the African diaspora, the role played in colonial America, slavery, the U.S. Civil War and Reconstruction. Emphasis is on the African Americans' contributions to America's development.
Prerequisite: Language Proficiency

HST 241 Afro-American History II (3-0) 3 Hours
This course surveys the role of African Americans in the United States from the end of Reconstruction to the present. Emphasis is on the contributions to America's development and the problems encountered.
Prerequisite: Language Proficiency

HORTICULTURE (HRT)

Biological & Health Sciences Division,
Room C140, (847) 543-2042

HRT 110 Landscape Maintenance (2-2) 3 Hours
A course designed for those interested in and/or those presently working in the field of landscape care and maintenance. Included topics are pruning, fertilizing, and planting of trees and shrubs, general turf care, and pest identification and control.
Course fee

HRT 111 Basic Horticulture (3-0) 3 Hours
An entry-level course that introduces basic plant anatomy, terminology, and functions of plants. Professions working with the culture and use of ornamental plants will be included.
Prerequisite: Language and Math Proficiency

HRT 112 Tree Identification (2-2) 3 Hours
Identification of deciduous and evergreen trees by their common and botanic names. Emphasis is placed on trees commonly used in landscaping and their outstanding characteristics. Approximately 120 trees will be covered in this course.
Course fee

HRT 113 Shrub Identification (2-2) 3 Hours
A continuation of tree identification to include small trees, shrubs, vines, and ground covers by their common and botanic names. Approximately 110 species will be covered in this course.
Course fee

HRT 114 Soils, Fertilizer, and Water (2-2) 3 Hours
Students will be introduced to the science and function of native and artificial soils as they relate to plants and the environment. Topics on formation, physical characteristics, nutrient content and availability, water movement, and biota interactions are covered.
NOTE: A basic knowledge of chemistry is helpful.
Corequisite: HRT 111
Course fee

HRT 116 Entomology (2-2) 3 Hours
Studies the importance of insects to man. Topics include insect biology, principles of pest management, natural and applied insect control, and insect pests of vegetables, fruit, and ornamental plants. Labs include observation, identification , and diagnosis of insect plant pests.
Prerequisite: Language and Math Proficiency
Course fee

HRT 118 Landscape Graphics (2-2) 3 Hours
Students are exposed to various methods of collecting and communicating existing and desired information for the purpose of creating a landscape design to meet the needs of the client.
Prerequisite: Language and Math Proficiency
Course fee

HRT 119 Plant Pathology (2-2) 3 Hours
An introductory course in plant pathology covering the biology and management of agents causing disease and growing disorders. Students study these agents and the problems that they cause, along with possible management tools.
Prerequisite: HRT 111
Course fee

HRT 170 Arboriculture (2-2) 3 Hours
A lecture and laboratory course covering the care and maintenance of trees. A good portion of the laboratory teaches the students to climb and prune trees using standard safety practices.
NOTE: Good physical health is required. HRT 112 may be helpful.
Course fee

HRT 172 Interior Plant Maintenance (2-2) 3 Hours
A lecture and laboratory course covering the design, installation, and care of interior plantings. Begins with the basics of plant identification, growth and development, and propagation. Other topics include fertilization, soils, indoor climates, pests, diseases, and business operations.
Corequisite: HRT 111
Course fee

HRT 173 Perennial Flowers (2-2) 3 Hours
Identification, care, and maintenance of herbaceous plants. Approximately 125 plants will be covered in this course.
NOTE: Field trips and outdoor labs are included.
Course fee
Offered summer only.

HRT 174 Basic Floral Design (2-2) 3 Hours
Introduces the principles of floral design including the care and use of floral materials and accessories. Identification, handling, and storage of cut flowers will be covered. In addition to construction of basic arrangements, the floral industry and working in a flower shop will be discussed.
Course fee

HRT 175 Advanced Floral Design (2-2) 3 Hours
Focuses on arrangements for special occasions such as weddings, funerals, and holidays. Customer relations will also be emphasized.
Prerequisite: HRT 174
Course fee

HRT 176 Small Engine Repair and Maintenance (2-2) 3 Hours
A laboratory course covering proper use, maintenance, and basic repair of power equipment used in horticulture. Emphasis will be on two- and four-cycle small engines used to operate such equipment.
Course fee

HRT 210 Greenhouse Crop Production (2-2) 3 Hours
A course covering the production of greenhouse crops and the cultural practices required for growth. Seeding, watering, fertilization, containers, growing medias, temperature control, and insect and disease control will be covered. Bedding plants and pot crops will be grown throughout the semester.
Prerequisite: HRT 111
Course fee

HRT 212 Turf Management (2-2) 3 Hours
Examines the principles and practical knowledge necessary for the establishment and maintenance of high-quality turfgrass stands for use as home lawns, golf courses, athletic fields, parks, and other commercial areas.
Prerequisite: HRT 111
Course fee

HRT 213 Landscape Design (2-2) 3 Hours
An introduction to and practice of the theory and practical approach to residential landscape design. Students take a design project from concept through final presentation.
NOTE: HRT 112 and HRT 113 are recommended.
Prerequisite: HRT 118
Course fee

HRT 214 Landscape Construction (2-2) 3 Hours
A lecture and lab course working with the installation of landscapes. Organization, set up, and construction will be covered. Students will be assigned projects that will include design and cost estimates. Handling equipment and actual construction may be included.
Corequisite: HRT 118
Course fee

HRT 215 Computer Landscape Design (2-2) 3 Hours
The use of AutoCAD for site planning and landscape design used in the creation of landscape plans. Emphasis is placed on practical application of software and hardware to develop working drawings for the landscape industry.
Corequisite: HRT 118
Course fee

HRT 216 Natural Areas Management (2-4) 4 Hours
Restoring and caring for our natural areas has become an important role for a variety of landscape professionals. This class will provide an overview of natural areas restoration and management issues for northern Illinois and southern Wisconsin. Major plant communities for this region such as wetland, prairie and woodland will be addressed in terms of their ecology, key identifying features, management issues and restoration techniques. Fieldtrips will be integrated to provide students with exposure to all phases of restoration work, from initial construction to high-quality natural area. Fieldtrips also will provide an opportunity for hands-on practice at various management techniques like prescribed burning and vegetation monitoring.
Prerequisite: HRT 111 or BIO 120, and BIO 126

HRT 217 Plant Propagation (2-2) 3 Hours
A hands-on course focusing on the techniques and procedures involved in propagating plants. Sexual and asexual methods are practiced, and environmental conditions needed to promote growth and development are considered. Seed propagation, cutting propagation, and grafting will be included.
Corequisite: HRT 111
Course fee

HRT 276 Fieldwork (1-15) 3 Hours
A special project set up by the student and a HRT faculty member to cover a specific area of interest to the student.
Prerequisite: 12 hours of HRT (C or better)

HRT 277 Field Study in Horticulture (Variable) 1-3 Hours
Students will travel with faculty to international/regional locations, which may vary from year to year, to study selected topics in horticulture. The course may emphasize the landscape design, the plant materials used, and the installation, care, and maintenance of the various gardens visited. Lectures, field trips, demonstrations, and on-site, individualized instruction will be used.
NOTE: Travel expenses are paid by the student.
May be taken three times, but any topic only once

HUMANITIES (HUM)

Communication Arts, Humanities &
Fine Arts Division, Room B237, (847) 543-2040

HUM 121 Introduction to Humanities I (3-0) 3 Hours
An interdisciplinary course that introduces students to art, literature, music and philosophy of ancient and medieval, western and non-western civilizations.
Prerequisite: Language Proficiency
IAI: HF 902

HUM 122 Introduction to Humanities II (3-0) 3 Hours
An interdisciplinary course that introduces students to art, literature, music, and philosophy of western or non-western civilizations.
Prerequisite: Language Proficiency
IAI: HF 903

HUM 123 Introduction to Film (3-0) 3 Hours
This is an introductory course on the historical, technical and aesthetic study of film. Students learn how the film maker communicates to us through camera movement, angles, lenses, lighting, sound, color, and editing. Gain a historical perspective on film by viewing samples from the 1920's through the present day and analyzing both genre films such as the western, horror, musical, adventure or comedy as well as non-genre and documentary film making.
Prerequisite: Language Proficiency
Course fee
IAI: F2 905

HUM 124 International and Regional Studies in the Humanities (Variable) 1-4 Hours
Students travel with faculty to international or regional locations which may vary from year to year to study the humanities. The course may emphasize the literature, language, music, philosophy or art of the area. Lectures, field trips, demonstrations and on site individualized instruction will be used.
NOTE: Travel expenses are paid by the student. Credit would be arranged with instructor. No more than 4 credit hours will count toward an associate degree or career certificate.
Prerequisite: Language Proficiency
May be taken four times for credit toward degree

HUM 125 Introduction to Fine Arts I (3-0) 3 Hours
An introductory study of the theory and principles of the fine arts. Includes a survey of art history and major artistic achievements, schools, and trends. For non-art majors. Develops an understanding of aesthetic concepts and theories through studio experience and ungraded art projects.
Prerequisite: Language Proficiency
Course fee
IAI: F2 900

HUM 126 Introduction to the Performing Arts (3-0) 3 Hours
This course provides an interdisciplinary approach to the performing arts, including music, ballet and modern dance, drama and opera, as well as current performing art trends. Part of this course involves the study of philosophic, psychological and aesthetic perspectives of these performance style arts; another part will be devoted to viewing and analyzing different performing arts productions from the perspective of an educated audience member.
Prerequisite: Language Proficiency
IAI: F9 900

HUM 127 Critical Thinking (3-0) 3 Hours
An introduction to critical thinking skills (i.e. informal logic), including the following: problem solving, diagramming arguments, constructing sound reasoning skills and habits, detection of fallacies and reasoning in the disciplines. The course places an emphasis on interdisciplinary reasoning both in the course's content, and in that the course may be taught by qualified faculty from a variety of disciplines.
Prerequisite: Language Proficiency
IAI: H4 906

HUM 128 Introduction to Middle Eastern Civilizations (3-0) 3 Hours
A multi-media exploration of (1) the diverse philosophical and religious concepts and values in the Middle East, (2) the diverse expressions of these concepts and values in the art, architecture, craftsmanship, film, and literature produced by the cultures of North Africa, Egypt, Israel, Turkey, the Fertile Crescent, Arabian Peninsula, Iran, and Pakistan, and (3) the relation of these concepts and values to current philosophical issues in the Middle East regarding politics, economics, and gender. Comparisons will be made with Western philosophy, art, architecture, craftsmanship, film and literature.
IAI: H2 903N

HUM 221 American Decades (3-0) 3 Hours
This course introduces students to the interdisciplinary study of American culture by examining the intercultural/multicultural ideas, processes, values, motifs, and traditions that have shaped our "pluralistic" society. American history, philosophy, literature, music, visual and performing arts will be studied. Emphasis will be placed on reflecting the diverse cultural constituency of the United States and the cultural identity of American racial and ethnic minorities. Focus will be placed on specific decades; by comparing these decades students will develop analyzing and synthesizing skills which will be used to reveal a holistic picture of American life.
Prerequisite: Language Proficiency
Offered fall only.
IAI: HF 906D

HUM 222 Film and Society (3-0) 3 Hours
This course will examine the evolution of American cinema and its relationship to society. The course will focus on the history of film and the social, economic and political pressures which have shaped its development. Special attention will be paid to important facets of the film industry such as the genre, studio and star system.
Prerequisite: Language Proficiency
Course fee
IAI: F2 905

HUM 225 The Art of Dance (3-0) 3 Hours
This course introduces students to an interdisciplinary approach to the art of dance. Combining an historical framework with various dance genres and a study of stylistic movement, the course introduces ancient and modern trends; a variety of genres, including ballet, modern, jazz, musical , tap, and video; psychological and philosophical aspects of movement; and the work of selected choreographers. Students will attend live dance performances at the college, in Lake County, and in the Chicago area. The student will move from the study of history and the creative process of dance to the role of a member of the dance audience and dance critic.
Prerequisite: Language Proficiency
IAI: F1 906

HUM 226 Women and the Arts (3-0) 3 Hours
This interdisciplinary humanities course explores the depictions and contributions of women in the visual and performing arts throughout history. Current multicultural and global developments in the visual and performing arts, the contrast of female and male creativity, social attitudes towards women and by women, and patronage of the arts will be investigated. Lectures, discussion/analysis, multimedia, guest speakers, demonstrations, area performances, visits to museums and galleries, small group discussions and presentations will be used to illuminate the subject matter.
Prerequisite: ENG 120 or ENG 121
IAI: HF 907D

HUMAN SERVICES PROGRAM (HUS and HUX)

Social Science Division, Room A244,
(847) 543-2047

HUS 111 Health and Nutrition (3-0) 3 Hours
The course focuses on personal health needs of the individual, including nutrition, health, and safety issues with emphasis on meeting health/safety needs for children, adolescents, and adults in group settings. A healthy lifestyle, preventive health, and community health are examined.
Prerequisite: Language and Math Proficiency

HUS 112 Community Social Services (3-0) 3 Hours
An overview of the range of public and private social services available to children, families, and individual adults. Physical health services, counseling services, financial aid, and protective services are included.
Prerequisite: Language Proficiency

HUS 113 Group Processes (3-0) 3 Hours
Introduces basic theories of group processes and related communication skills. Laboratory experiences include observations of group behavior and experiences in self-understanding in relationship to other members in the group.
Prerequisite: Language Proficiency

HUS 114 Human Services Supervision (3-0) 3 Hours
Designed to develop an understanding of the major functions of management in the human services area. Various methods of planning, organizing and directing are examined.
Prerequisite: Language Proficiency

HUS 116 Principles of Foster Care (1-0) 1 Hour
For people who have received basic orientation for foster care from the agency for which they are fostering children. It seeks to acquaint new and experienced foster parents with basic concepts in fostering through formal presentations and learning from other class members.
Prerequisite: Language Proficiency

HUS 117 Behavior Assessment (4-0) 4 Hours
Presents the idea of planned intervention to human systems utilizing verified principles of behavior change. Emphasis placed on the ways in which behavior is determined by factors in natural social situations. Research and the practical application of behavior change techniques are stressed.
Prerequisite: PSY 121 (C or better)

HUS 118 Professional Helping Skills (3-0) 3 Hours
An introduction to the dynamics of establishing positive relationships with people in need of human services. The issue of intervention, therapeutic interviewing, confidentiality, and empathetic communication will be presented. Required field experience of 40 hours with HUS coordinator-appointed social service agencies.
Prerequisite: Language Proficiency

HUS 170 Human Service Practicum I (1-12) 4 Hours
Supervised work experience at a designated facility that provides services related to the Human Service option which the student has elected. Total of 180 practicum hours, plus 30 hours of supervision.
Prerequisite: Language Proficiency, sophomore standing, 2.3 GPA, coordinator's approval 60 days prior to the start of the semester for which the practicum is requested

HUS 171 Human Service Practicum II (1-12) 4 Hours
A continuation of supervised work experience in a preschool setting, residential childcare facility, or other community agency employing human service workers. The student is guided from the Practicum I level of limited leadership to a level of total responsibility for programming during the hours the student serves at the practicum site. Total of 180 practicum hours, plus 30 hours of supervision.
Prerequisite: Language Proficiency, sophomore standing, 2.4 GPA, HUS 170 (C or better), coordinator's approval 60 days prior to the start of the semester for which the practicum is requested

HUS 210 Principles of Residental Care (3-0) 3 Hours
Methods and procedures used in residential care agencies, including program planning, activity management, and means of meeting needs of adolescents.
Prerequisite: HUS 223

HUS 213 Mental Retardation (3-0) 3 Hours
Reviews the basic theories regarding the diagnosis and treatment of mental retardation. Programs designed for the care and education of the mentally retarded are emphasized and present and future perspectives in the field of mental retardation are discussed.
Prerequisite: Language Proficiency

HUS 217 Creative Activities II (2-2) 3 Hours
Creative activities used in the development of school-age children and adolescents in residential group care.
Prerequisite: Language Proficiency

HUS 218 Psycho-Social Aspects of Aging (3-0) 3 Hours
Presents knowledge and insight into the prevention of mental health problems persons experience in the latter years of life. Personality problems associated with aging discussed as well as the environmental problems experienced by the aging. Focus placed on the treatment and programs designed for the aging.
Prerequisite: Language Proficiency

HUS 219 Internship (2-15) 5 Hours
Individual supervision and group seminars. Includes anticipation of employed human service technician's role on a social services team. Laboratory experience scheduled as much as possible in an area of student's interest. The internship involves 250 hours which includes 30 hours of supervision.
Prerequisite: Language Proficiency, sophomore standing, 2.4 GPA, HUS 171 (C or better), consent of HUS coordinator

HUS 223 Adolescent and Adult Development (3-0) 3 Hours
Analysis of social, cultural, cognitive, emotional, and physiological aspects of growth and development from adolescence through adulthood.
Prerequisite: PSY 222

HUS 299 Special Topics in Human Services (Variable) 1-3 Hours
Special topics will be developed for the different Human Services Options. Topics developed will focus on a specific current issue in the areas of adult services or alcohol and substance abuse.
NOTE: A maximum of six (6) credit hours of HUS 299 may be used as elective credit toward an A.A.S. degree in Human Services.
Prerequisite: Language Proficiency
May be taken twice, but any topic only once

FOR ALL HUX COURSES - SEE ADDITIONAL REQUIREMENTS LISTED WITH HUMAN SERVICES PROGRAM UNDER ASSOCIATE IN APPLIED SCIENCE PROGRAMS OF STUDY

HUX 170 Introduction to Substance Abuse (3-0) 3 Hours
Provides the student with a historical background of substance abuse, the addictive process, and approach to treatment. Specific topics addressed include major classifications of abused substances, the resulting of treatment modalities, and the application of specific counseling strategies to addiction.
Prerequisite: Language Proficiency

HUX 171 Assessment and Diagnosis of Alcoholism and/or Substance Abuse Disorders (2-0) 2 Hours
A study of procedures, verbal and written data gathered during the client/intake process that forms the basis for a multivariate diagnosis of alcoholism and/or substance abuse. Assessment procedures will include but are not limited to Jellinek's categories of alcoholism; the Michigan Alcoholism

Screening Test (MAST); Behavioral Assessment of Alcohol Abuse (BAAA), and various types of life style questionnaires. The student will be expected to integrate behavioral, psychological, attitudes, physiological and clinical data to support a differential diagnosis of alcoholism and/or substance abuse. The differential diagnosis method will be utilized to match the client with the appropriate differential treatment plan.
Prerequisite: HUX 170

HUX 172 Other Addictive Disorders (2-0) 2 Hours
Examination of the addictive process as it is manifested in diverse social behaviors. Similarities and differences of potentially addictive behaviors will include, but not be limited to the following: gambling, smoking, eating disorders, caffeine, work, sex, compulsive spending, shoplifting, and some types of love relationships. The addictive process of "other addictive disorders" will be compared and contrasted with addictive process of alcohol and drugs.
Prerequisite: Language Proficiency

HUX 173 Special Populations and Addictive Disorders (2-0) 2 Hours
Consideration of special groups, ethnic and culture groups with distinctive patterns of ASAAD. For each subpopulation studied, the differential addiction patterns will be explained; response to traditional treatment methods identified; and application of research data and treatment modes to accommodate the needs of subpopulation groups.
Prerequisite: HUX 170

HUX 174 Ethics, Law, Regulation, Records and Documentation (2-0) 2 Hours
Introduction to multiple ethical considerations in the client relationship with professional staff. Elements considered will include but are not limited to: personal values of professional staff; confidentiality of information; sexual contact and social contacts with clients. Adequate client record documentation systems will be studied and correlated with the process of keeping client records current.
Prerequisite: Language Proficiency

HUX 175 Pharmacological and Other Medical Terminology (1-0) 1 Hour
Study of terms used in the medical profession and the psychotherapy profession as described in the Diagnostic and Statistical Manual (DSM IV) and the International Classification of Disease (ICD Codes). Abbreviations, spelling, pronunciation are emphasized. A summary of the neuro transmitter process is also included.
Prerequisite: Language Proficiency

HUX 176 Advanced Counseling Skills for Addictive Disorders (3-0) 3 Hours
A study of the major theoretical approaches used in counseling alcoholism, substance abuse and addictive disorders. Theory, principles and applications are emphasized. Special client problems generic to the diseases of addiction will be addressed.
Prerequisites: HUS 118, HUX 170, and HUX 172

HUX 177 Advanced Group Counseling Skills (2-2) 3 Hours
An integration of the major theoretical approaches to group work with practical experimental application to groupwork in a variety of human service settings. Students are expected to participate as both group leaders as well as group participants with personal concerns that need intervention.
Prerequisite: HUS 113

HUX 178 Assessment and Treatment of Addictive Families (2-0) 2 Hours
Written and observational procedures of all family members where one or more members have an addictive disorder. Treatment issues include: co-dependency; progressive symptoms and survival strategies of each family member; family interaction patterns and communication processes.
Prerequisites: HUS 118, HUX 170, and SOC 224

HUX 179 Psychosocial Aspects of HIV Infections and Chemical Health (2-0) 2 Hours
An interdisciplinary analysis of the biological, social and psychological aspects of HIV infections, and disease progression. Risk assessment, risk reduction, psychological interventions, medical management and legal issues are included.
Prerequisite: Language Proficiency

INDUSTRIAL ELECTRICIAN (ISE)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

ISE 110 Introduction to Industrial Electricity (1-2) 2 Hours
Introductory course in industrial electricity. Emphasis placed on fundamental principles and practices.
Prerequisite: MTH 114
Course fee

ISE 111 Industrial Electrical Circuits I (2-2) 3 Hours
Introduces students to electrical fundamentals as related to direct current systems and applications.
Prerequisite: MTH 114
Course fee

ISE 112 Industrial Electrical Circuits II (2-2) 3 Hours
Introduces students to electrical fundamentals as related to alternating current systems and applications.
Prerequisite: ISE 111
Course fee

ISE 114 National Electrical Code (2-0) 2 Hours
Provides the student with the opportunity for study and interpretation of the National Electrical Code.
NOTE: Previous electrical experience/education is strongly recommended.

ISE 117 Industrial Electronic Devices (2-2) 3 Hours
Introduces students to a wide variety of analog and digital circuits used in various electronic systems and devices used in the home and industry.
Prerequisite: MTH 115 and ELC 114
Course fee

ISE 118 Power Distribution (2-2) 3 Hours
Electrical and electronic applications on industrial equipment including simple and automated welding control circuits, switching circuits, light and heat controls, speed and voltage regulators, large current polyphase rectifiers, temperature recorders and control, high speed light and register controls, automatic control of D.C. motors, closed loop servomechanisms, and electronic service instruments.
Prerequisite: MTH 115 and ELC 114
Course fee

INDUSTRIAL MAINTENANCE & REPAIR (IMR)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

IMR 110 Industrial Pneumatics and Hydraulics (3-0) 3 Hours
A study of fluid power technology using liquid or compressed air as the transfer media. Complete hydraulic and pneumatic systems are studied including power sources, reservoirs, pumps, compressors, lines, valves and actuators.

IMR 111 Machine Components and Repair (2-2) 3 Hours
This course deals with the construction and repair of machines. Machine parts such as belts, gears, bearings, and fasteners will be discussed and repaired on machinery.
Prerequisite: Math Proficiency
Course fee

IMR 112 Pump Overhaul and Repair (2-2) 3 Hours
Designed to provide the student with the ability to diagnose, troubleshoot, repair and maintain common types of centrifugal pumps.
Prerequisite: Math Proficiency
Course fee
Offered fall only.
Offered even years only.

IMR 113 Plumbing and Pipefitting I (2-2) 3 Hours
Designed to introduce the student to the basic principles and practices of plumbing and pipefitting.
Prerequisite: Math Proficiency
Course fee

IMR 114 Plumbing and Pipefitting II (2-2) 3 Hours
Designed to provide the student with greater insight into the principles and practice of plumbing and pipefitting.
Prerequisite: IMR 113
Course fee

IMR 115 Carpentry I (2-2) 3 Hours
The essential details of frame dwelling construction, such as footings, girders, floor joists, floor openings, subflooring, balloon and platform types of framing, and rough framing of window and door openings are covered. The proper and safe usage of power and hand tools will also be covered.
Prerequisite: Math Proficiency
Course fee

IMR 116 Carpentry II (2-2) 3 Hours
Roof framing and interior and exterior trim are covered. Related work includes instruction in the building of cornices; applying exterior wall coverings; the construction of door and window frames; the application of baseboards, casings, and jambs: hanging and fitting doors: and the installation of hardware.
Prerequisite: IMR 115
Course fee

INTERNATIONAL STUDIES IN SOCIAL SCIENCE (SSI)

Social Science Division, Room A244, (847) 543-2047

SSI 124 International Studies in Social Science (Variable) 1-3 Hours
Students will travel with faculty to international/regional locations which may vary from year to year to study selected topics or current issues in the social or behavioral sciences (anthropology, sociology, psychology, geography, history, political science, economics). The instructor will assist students in developing required activities or projects undertaken during the travel experience. These will include field trips, lectures, discussions or other appropriate activities. Credit is variable and arranged with the instructor. Students are responsible for the travel expenses, tuition, and fees.
Prerequisite: Language Proficiency
May be taken three times, but any topic only once

ITALIAN (ITL)

Communication Arts, Humanities &
Fine Arts Division, Room B237, (847) 543-2040

ITL 121 Beginning Italian I (4-0) 4 Hours
An introduction to the Italian language. The course develops basic skills in pronunciation, vocabulary, grammar, reading, listening comprehension, and oral and written communication within the context of Italian culture.
Prerequisite: Language Proficiency

ITL 122 Beginning Italian II (4-0) 4 Hours
This course continues to develop the basic skills introduced in ITL 121: pronunciation, vocabulary, grammar, reading, listening comprehension, and oral and written communication within the context of Italian culture.
Prerequisite: ITL 121

ITL 221 Intermediate Italian I (4-0) 4 Hours
Continued development of basic skills introduced in ITL 121 and ITL 122. The course is a general review and expansion of beginning grammar, conversation, vocabulary development, readings and writing exercises which focus on life in Italy.
Prerequisite: ITL 122

ITL 222 Intermediate Italian II (4-0) 4 Hours
This course is a continuation of ITL 221 and is designed to increase knowledge of Italian grammar and culture through practice in reading, writing, and speaking the language.
Prerequisite: ITL 221
IAI: H1 900

ITL 223 Italian Civilization I (4-0) 4 Hours
This is the first semester of a course designed to give the advanced student of Italian the opportunity to increase proficiency in the Italian language and knowledge of the Italian culture. A carefully selected series of readings and supplementary materials will provide the basis for the development of language and culture skills.
Prerequisite: ITL 222
IAI: H1 900

JAPANESE (JPN)

Communication Arts, Humanities &
Fine Arts Division, Room B237, (847) 543-2040

JPN 121 Beginning Japanese I (4-0) 4 Hours
This course develops basic skills in pronunciation, vocabulary, grammar, reading, listening, comprehension, and oral and written communication within the context of Japanese culture.

JPN 122 Beginning Japanese II (4-0) 4 Hours
This course continues to develop the basic skills introduced in JPN 121: pronunciation, vocabulary, grammar, reading and writing of Kana and Kanji, listening comprehension, and oral and written communication within the context of Japanese culture.
Prerequisite: JPN 121

JPN 221 Intermediate Japanese I (4-0) 4 Hours
Designed to continue the development of basic skills, this course is a general review and expansion of beginning grammar, along with conversation, vocabulary development, and reading and writing of Kana and Kanji within the context of Japanese culture.
Prerequisite: JPN 122

JPN 222 Intermediate Japanese II (4-0) 4 Hours
As a continuation of JPN 221, this course increases knowledge of Japanese grammar and culture through practice in reading, listening comprehension, speaking, and reading and writing of Kana and Kanji.
Prerequisite: JPN 221
IAI: H1 900

LIBERAL ARTS & SCIENCE (LAS)

Vice President, Educational Affairs, Room C213,
(847) 543-2411

LAS 221 Sophomore Seminar (3-0) 3 Hours
An in-depth cross-disciplinary examination of selected topics arising from existing CLC transfer courses. Content varies.

LIBRARY SCIENCE (LSC)

Communication Arts, Humanities &
Fine Arts Division, Room B237, (847) 543-2040

LSC 101 Library Basic Skills (0-2) 1 Hour
Library Basic Skills is a module designed to help students learn basic library searching skills such as the card catalog, indexes and handbooks of information. Instruction is self-paced and self-scheduled, and utilizes a workbook. Students are tested on concepts from each unit through paper and pencil tests in the Testing Center. The final examination is a practical test in which the student goes to the Reference Department in the Learning Resource Center and answers prepared paper and pencil questions.
Prerequisite: Language Proficiency

LIBRARY TECHNICAL ASSISTANT (LTA)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

LTA 114 Supervised Field Practicum I (0-4) 2 Hours
Supervised observation and directed practice of paraprofessional experience in appropriate academic, special, school, or public libraries. Projects of benefit to the student and to the cooperating library are arranged. Progress toward satisfactory completion is regularly monitored by the LTA Coordinator or designated LTA faculty and the supervising librarian. Students maintain brief descriptive logs. This course is primarily for students pursuing the Certificate in the Library Technical Assistant program.
Prerequisite: Twelve hours of LTA courses and consent of LTA coordinator.

LTA 115 Supervised Field Practicum II (0-6) 3 Hours
Supervised observation and directed practice of paraprofessional experience in appropriate academic, special, school, or public libraries. Projects of benefit to the student and to the cooperating library are arranged. Progress toward satisfactory completion is regularly monitored by the LTA Coordinator or designated LTA faculty and the supervising librarian. Students maintain brief descriptive logs. This course is primarily for students pursuing the Associate Degree in the Library Technical Assistant program.
Prerequisite: Twelve hours of LTA courses and consent of LTA coordinator.

LTA 121 Introduction to Library Science (3-0) 3 Hours
The written word, from its origins in prehistory to its current interactive databases, is historically interwoven within library material preservation. Through practical exercises, students learn fundamental processes of automated databases such as online public access catalogs and periodical indexes. Students also search basic reference materials, such as common dictionaries and encyclopedias as well as yearbooks, handbooks, and biographical dictionaries. Intellectual freedom and interpersonal communication within libraries are emphasized. Individual preparation of a bibliography utilizing learned skills is required.
Prerequisite: Language Proficiency

LTA 171 Audio-Visual Media and Equipment (3-0) 3 Hours
This course is intended to develop an appreciation for the nature of Audio-Visual materials and an understanding of their use in educational settings. Emphasis will be placed upon the physical operation of common A-V equipment and selection and evaluation of various media.

LTA 172 Reference and Public Services I (3-0) 3 Hours
Print, CD-ROM, Online, Internet and Audio-Visual reference sources in Art, Biography, Literary Criticism, Education, and Business are highlighted. Interpersonal skills in working with patrons are emphasized. Circulation services are outlined. The Reference Department is described in the context of public services.
Prerequisite: LTA 121 and at least one computer-related course from the LTA elective list.

LTA 173 Reference and Public Services II (3-0) 3 Hours
Print, CD-ROM, Online, Internet and Audio-Visual reference sources in Current Events, Social Sciences, Life Sciences, Medicine, and Technology are highlighted. Citation of sources is emphasized. Area practices in interlibrary loan and document delivery are discussed. Reference material purchase decisions are outlined.
Prerequisite: LTA 121 and at least one computer-related course from the LTA elective list.

LTA 272 Cataloging and Classification (3-0) 3 Hours
Practical preparation for a role as a supervised copy cataloger. Emphasis is on descriptive cataloging of book and non-book materials with AACR2 Rev. and MARC format. Introduction to subject cataloging using Sears List of Subject Headings and classification using Dewey Decimal Classification.
Prerequisite: LTA 121

LTA 273 Library Materials (3-0) 3 Hours
Criteria and sources for selection, ordering, and receiving print and non-print materials. Designed to provide solid background in how to develop a collection which is suitable for its clientele.
Prerequisite: LTA 121

LTA 277 Automation for Libraries (2-2) 3 Hours
An introduction to automation in all library departments: circulation, technical services, reference, and administration. Applications of micro and mini computers; local area networks, Internet and connectivity are highlighted.
Prerequisite: LTA 121 and CIS 120

LTA 279 Children's Library Services (3-0) 3 Hours
The audience for Children's Library Services, infants to young adults, and parents and teachers, is examined. Hands on approaches are used in the exploration of programming and publicity. Discussions and projects involve collection development (including digital resources), policy, and budget issues. Administration, employee presentations, and grant writing are outlined. Networking opportunities and job interviewing are discussed. The Internet for children is highlighted.
Prerequisite: LTA 121

MACHINE TOOL TRADES (MTT)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

MTT 110 Machine Trades Blueprint Reading (3-0) 3 Hours
Designed to study the principles which are essential for visualization and training in the interpretation of blueprints and sketches of machine parts. Attention is given to representations of common machine processes, special forms of dimensioning, sections, auxiliary views, symbols, geometric tolerancing, machine sketching, surface finished and other drafting and design principles.
Offered fall and spring only.

MTT 111 Machine Shop I (2-3) 3 Hours
Designed as an introduction to machining and machine shop practices. Study topics include hand tools, measurement, cut off machines, drilling machines, taps and dies, turning machines, milling machines, grinding machines and general safety.
Course fee
Offered fall and spring only.

MTT 112 Machining Principles (3-0) 3 Hours
Geared for a 1st year tool and die apprentice or engineering student. The class covers the theory and some practice of modern metal cutting machines including sawing, drilling, turning, milling, grinding, EDM and CNC.
Offered fall only.

MTT 113 Grinding Technology (2-2) 3 Hours
Designed to provide the student with grinding theory and practice. Surface, cutter, sine plate, form and cutter grinding are included.
Course fee
Offered fall only.
Offered even years only.

MTT 115 Introduction to Die Making (3-0) 3 Hours
Presents the student with the basic fundamentals of die construction, function and die components.
NOTE: Machine shop skills and basic shop mathematics are strongly recommended.
Prerequisite: MTT 110
Offered spring only.
Offered odd years only.

MTT 116 Introduction to Moldmaking (3-0) 3 Hours
Designed to provide the student with basic fundamentals of mold construction and components.
NOTE: Machine shop skills and basic shop mathematics are strongly recommended.
Prerequisite: MTT 110
Offered spring only.
Offered even years only.

MTT 210 Machine Shop II (1-4) 3 Hours
Designed as a continuation of material and information presented in Machine Shop I. Additional topics of study include advanced operations on the lathe and vertical milling machine, grinding, EDM, heat treating and materials usage.
NOTE: Shop math skills or MTH 115 is strongly recommended.
Prerequisite: MTT 111
Course fee

MTT 211 Jig and Fixture Design (2-2) 3 Hours
Designed to familiarize the student with the design fundamentals of drill jigs and milling, lathe, assembly, and grinding fixtures.
Prerequisites: MTT 110 and MTT 210
Course fee
Offered spring only.
Offered odd years only.

MTT 212 Precision Machining (1-4) 3 Hours
Deals with precise, complex, and less frequently used machining operations. Use of indexing devices, tool post grinders, and the electro-discharge machine will be covered.
NOTE: Shop math skills or MTH 115 is strongly recommended.
Prerequisite: MTT 210
Course fee

MTT 215 Die Making II (2-2) 3 Hours
A continuation of Diemaking I. Students build a punch press die, sharpen the tools and manufacture a part in class.
NOTE: Students with Machine Shop experience may contact the program coordinator if interested in alternative methods of meeting the prerequisite.
Prerequisites: MTT 115
Course fee
Offered fall only.
Offered odd years only.

MTT 216 Moldmaking II (2-2) 3 Hours
Designed for students to learn advanced mold components, moldmaking, advanced mold techniques and understanding of plastics. The nature of this course will range from basic knowledge of plastics to actually building a small mold and molding it.
NOTE: Students with Machine Shop experience may contact the program coordinator if interested in alternative methods of meeting the prerequisite.
Prerequisite: MTT 116

MANUFACTURING TECHNOLOGY (MFG)

Engineering, Math & Physical Sciences Division, Room B162, (847) 543-2044

MFG 112 Work Simplification (3-0) 3 Hours
Principles of job analysis and productivity measurement and improvement in techniques used in the work place are discussed and evaluated. Specific techniques studied include motivation and job enrichment, motion and time study, process flow charts and production system evaluation. *NOTE:* Prior completion of Technical Mathematics I (MTH117) or higher is strongly recommended.

MFG 114 Introduction to Quality Analysis (3-0) 3 Hours
This course introduces the student to various quality analysis concepts and tools. Recognized standards, inspection methods, methods of presentation of data, basic control charts, and various quality improvement techniques are covered.

MFG 210 Manufacturing Materials (3-0) 3 Hours
A survey course which covers subjects related to a wide variety of materials used in manufacturing. Includes a development of understanding of the mechanical, physical, electrical and chemical properties of materials. Specific characteristics and processing methods for metals, polymers, ceramics, adhesives and composites will be described.

MFG 214 Advanced Quality Methods (3-0) 3 Hours
This course is a continuation of MCD 213 and deals with reliability, regression analysis, experimental design, hazard analysis and related concepts.
Prerequisite: MCD 213

MFG 215 Manufacturing Analysis (3-0) 3 Hours
Study of manufacturing methods and cost analysis using current principles of manufacturing/industrial engineering technology. Will incorporate a case study approach involving research and analysis of manufacturing related problems by individuals and groups. Topics for study and analysis include: plant layout and material handling, cost and value engineering, quality control, production control, inventory control, methods engineering and time study.
NOTE: Final semester standing.

MATH COMPUTER SCIENCE (MCS)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

MCS 124 Programming in Basic Language (2-0) 2 Hours
A beginning course in computer programming using the QBASIC language. Machine organization, input, and output, transfer of control, looping, arrays, character strings, subroutines, and sequential files are the major topics.
Prerequisite: MTH 102 (C or better) or an appropriate score on the Math Placement Test
Course fee

MCS 140 Computer Programming I (3-0) 3 Hours
This course is designed to fulfill the requirements established by the Association for Computing Machinery (ACM) for the CS1 course. It also is designed to meet the computer science requirements of engineering students. This is a course in machine organization, algorithm development and programming style using the C++ programming language. Applications include sorting and searching techniques, root solving procedures, and numerical integration. EXTENSIVE computer time commitment required.
NOTE: Previous programming experience is recommended.
Prerequisite: MTH 145 (C or better) or MTH 224 (C or better) or concurrent enrollment in MTH 145 or MTH 224
Course fee

MCS 141 Computer Science I (4-0) 4 Hours
The first in a sequence of courses for majors in Computer Science, this course introduces a disciplined approach to problem-solving, algorithm dev3elopment and data abstraction. The course covers" selection, repetition and sequence control structures; object-oriented program design, testing and documentation using good programming style/ and arrays, records, files and pointers.
NOTE: Pre-engineering students should enroll in MCS 140.
Prerequisites: MTH 108 (C or better) or an appropriate score on the Math Placement Test

MCS 142 Computer Programming II (3-0) 3 Hours
This course is designed to fulfill the requirements established by the Association for Computing Machinery (ACM) for the CS2 course. Using C++ programming language, this course presents such topics as string processing, internal searching and sorting, recusion, and data structures such as stacks, queues, linked lists, trees and graphs. EXTENSIVE computer time required.
Prerequisite: MCS 140 (C or better) or MTH 145 (C or better) and CIS 211 or CIS 216
Course fee
Offered spring only.

MCS 240 Introduction to Computer Systems (3-0) 3 Hours
This course is designed to fulfill the requirements established by the Association for Computing Machinery (ACM) for its CS3 course. Topics include computer structure, machine language, assembly language, addressing techniques, macros, program segmentation and linkage. Extensive time commitment required in computer lab.
Prerequisite: MCS 142 (C or better)
Course fee

MATHEMATICS (MTH)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

MTH 101 Elementary Concepts of Mathematics (Variable) 1-4 Hours
Basic principles of arithmetic: fractions, decimals, ratios, proportions, percent, very basic algebra, descriptive graphs and basic statistics all from a calculator based perspective.
NOTE: This course does not apply to any associate degree or career certificate. Specific electronic calculator required for this course. Contact EMPS division office for details.
May be taken four times, but any topic only once

MTH 102 Basic Algebra (Variable) 1-4 Hours
For those students whose interests lie in areas requiring a working knowledge of elementary algebra. Content mainly concerned with the manipulative skills of elementary algebra. Practical applications (story problems) will be introduced throughout.
NOTE: This course does not apply to any associate degree or career certificate program. A specific graphics calculator is required for this course. Contact the EMPS division office for details.
Prerequisite: MTH 101 (C or better) or Math proficiency
May be taken four times, but any topic only once

MTH 104 Geometry (4-0) 4 Hours
Geometry is equivalent to the concepts course in high school geometry. After a cursory review of algebra the concepts of undefined terms, axioms and postulates, and theorems are introduced. Topics also include plane and solid geometry, properties of congruence, similarity, ratio and proportion, area, perimeter, and volume of basic figures. Constructions and the writing of inductive, deductive, and indirect proofs are included.
NOTE: This course does not apply to any associate degree or career certificate.
Prerequisite: MTH 102 (C or better) or an appropriate score on the Math Placement Test

MTH 108 Intermediate Algebra (4-0) 4 Hours
For students who need College Algebra (MTH 122) or course of comparable difficulty in their curriculum but do not meet the prerequisite. Continues the development of the number system to include irrational and complex numbers. Equations, graphs, and inequalities involving linear and quadratic functions are emphasized. Exponential and logarithmic functions and sequences are introduced.
NOTE: This course does not apply to any associate degree or career certificate. A specific graphics calculator is required for this course. Contact the EMPS division office for details.
Prerequisite: MTH 102 (C or better) or an appropriate score on the Math Placement Test

MTH 109 Intro to the Graphics Calculator (1-0) 1 Hour
A course designed to help students prepare for classes requiring the use of a graphics calculator. Primary emphasis will be on topics used in College Algebra (MTH 122), Trigonometry (MTH 123), Finite Mathematics (MTH 127) and Statistics (MTH 222). Students in other disciplines such as the physical sciences may also find this course helpful. Topics will include graphing, finding roots and points of intersection, matrices, fitting a curve to a set of data points and elementary programming. A specific electronic graphics calculator is required for this course. Contact the EMPS division for details.
NOTE: This course does not apply to any associate degree or career certificate program.
Prerequisite: MTH 108 (C or better) or an appropriate score on the Math Placement Test

MTH 114 Applied Mathematics I (3-0) 3 Hours
Basic principles of mathematics are studied, with application to typical shop problems. Review of fractions, decimals, ratios, proportions, and percent. Introductory algebra, measuring systems, precision, and accuracy.
NOTE: Specific electronic calculator required for this course. Contact EMPS division office for details.

MTH 115 Applied Mathematics II (3-0) 3 Hours
Practical geometry, measurement of plane and solid figures, precision, accuracy, elementary right triangle trigonometry, law of cosines, and law of sines.
NOTE: A specific electronic calculator required for this course. Contact the EMPS division office for details.
Prerequisite: MTH 114 or MTH 102 (C or better) or appropriate score on the Math Placement Test

MTH 117 Technical Mathematics I (3-0) 3 Hours
College mathematics for students majoring in technology. Includes algebra, geometry and trigonometry.
NOTE: Specific electronic graphic calculator required for this course. Contact the EMPS division office for details.
Prerequisite: MTH 114 or MTH 102 (C or better) or appropriate score on the Math Placement Test

MTH 118 Technical Mathematics II (4-0) 4 Hours
Continuation of MTH 117. Major topics are algebra, geometry, vectors, logarithms, electronic graphics calculator, oblique and analytical trigonometry.
NOTE: Specific electronic graphics calculator required for this course. Contact EMPS division office for details.
Prerequisite: MTH 117 (C or better) or appropriate score on the Math Placement Test
Offered spring only.

MTH 121 Mathematics for Elementary Teaching I (3-0) 3 Hours
Principally designed as the first course for elementary education majors. General education requirements may be fulfilled by enrolling in our Quantitative Literacy course. Topics include problem solving, sets, logic, functions, numeration systems, real number system, number theory, probability and statistics. Use of a calculator will be integrated with the concepts of the course.
Prerequisite: MTH 108 (C or better) or appropriate score on Math Placement Test - AND - 1 year of High School Geometry or MTH 104 (C or better)

MTH 122 College Algebra (4-0) 4 Hours
Primarily for students who need to continue in mathematics. Topics include matrices, systems of equations, inequalities, absolute values, logarithmic and exponential functions, theory of equations, binomial theorem, progressions, and mathematical induction.
NOTE: A specific electronic graphics calculator is required for this course. Contact EMPS Division Office for details. MTH 122 is not open to those with prior credit in MTH 144, Precalculus. This course will not meet the General Education Math Requirement for first-time college students seeking the AA or AFA degrees.
Prerequisite: MTH 108 (C or better) or appropriate score on Math Placement Test - AND - 1 year of High School Geometry or MTH 104 (C or better)

MTH 123 Trigonometry (3-0) 3 Hours
Primarily for students who need to continue in mathematics. Topics include trigonometric functions and their graphs, identities, trigonometric equations, DeMoivre's Theorem, complex numbers, conic sections, and practical applications.
NOTE: A specific electronic graphics calculator required for this course. Contact EMPS division office for details.
Prerequisite: MTH 122 (C or better) or appropriate score on the Math Placement Test or *Corequisite:* MTH 122

MTH 127 Finite Mathematics I (3-0) 3 Hours
Designed primarily for commerce or social science students of whom it may be required. Topics include set theory, elementary combinatorics, probability, matrix algebra, introduction to linear programming, and Markov chains.
NOTE: Specific electronic graphics calculator is required for this course. Contact EMPS division office for details.
Prerequisite: MTH 122 (C or better) or appropriate score on the Math Placement Test
IAI: M1 906

MTH 141 Quantitative Literacy (3-0) 3 Hours
Designed to meet general education mathematics requirements. Elementary education majors should consider MTH121 Mathematics for Elementary Teaching I. Develops conceptual understanding, problem-solving, decision-making and analytic skills dealing with quantities and their magnitudes and interrelationships, using calculators and personal computers as tools. Includes: representing and analyzing data through such statistical measures as central tendency; dispersion, normal distribution, and correlation and regression to test hypotheses; using logical statements and arguments in a real-world context; estimating, approximating and judging the reasonableness of answers; graphing and using polynomial functions and systems of equations in the interpretation and solution of problems; and selecting and using appropriate approaches and tools in formulating and solving real-world problems.
Prerequisite: MTH 108 (C or better) or appropriate score on Math Placement Test or two years of High School Algebra - AND - 1 year of High School Geometry or MTH 104 (C or better)
IAI: M1 901

MTH 144 Precalculus (5-0) 5 Hours
Primarily for students who intend to take calculus. Topics include problem solving with equations, functions, polynomials, exponential functions, logarithmic functions, trigonometric functions, law of sines, law of cosines, trigonometric identies and equations, systems of equations and inequalities, parabolas, ellipses, hyperbolas, sequences and series, mathematical induction, and the binomial theorem.
NOTE: Students have the option of completing this course or MTH 122 and MTH 123 as a prerequisite for MTH 145 (Calculus and Analytic Geometry I.)
Prerequisite: MTH 108 (C or better) or appropriate score on Math Placement Test - AND - 1 year of High School Geometry or MTH 104 (C or better)

MTH 145 Calculus and Analytic Geometry I (5-0)5 Hours
A course in the calculus of algebraic and transcendental functions. Analytic geometry topics are limited to the line and circle. Calculus topics include differentiation and integration of both algebraic and trigonometric functions with applications.
NOTE: Specific electronic graphics calculator required for this course. Contact EMPS division office for details.
Prerequisite: MTH 123 (C or better) or MTH 144 (C or better) or appropriate score on the Math Placement Test
IAI: M1 900

MTH 146 Calculus and Analytic Geometry II (4-0) 4 Hours
MTH 146 is a continuation of MTH 145 which covers applications of the definite integral, techniques of integration, improper integrals, L'Hopital's Rule, sequences, series and polar coordinates.
NOTE: A specific electronic graphics calculator is required for this course. Contact EMPS division office for details.
Prerequisite: MTH 145 (C of better) or appropriate score on the Math Placement Test
IAI: M1 900

MTH 211 Technical Mathematics III (3-0) 3 Hours
Introductory integral and differential calculus with applications. Topics in analytic geometry also covered. Practical problems related to electronics emphasized.
NOTE: Specific electronic graphics calculator required for this course. Contact EMPS Division office for details.
Prerequisite: MTH 118 (C or better) or appropriate score on the Math Placement Test
Offered fall only.

MTH 221 Mathematics for Elementary Teaching II (3-0) 3 Hours
Principally designed as the second course for elementary education majors. General education requirements may be fulfilled by enrolling in our Quantitative Literacy course. Topics include modeling, Cartesian coordinate system, variation, plane and solid geometry, measurement, similarity and congruence, geometric constructions, areas, volume, classroom manipulatives, and computer software. Use of a calculator will be integrated with the concepts of the course.
Prerequisite: MTH 121 (C or better) or appropriate score on the Math Placement Test
Offered spring only.

MTH 222 Elementary Statistics (4-0) 4 Hours
Application of elementary principles of probability, descriptive statistics, an introduction to inferential statistics and elementary computer techniques.
NOTE: Specific electronic graphics calculator required for this course. Contact the EMPS Division office for details.
Prerequisite: MTH 108 (C or better) or appropriate score on Math Placement Test - AND - 1 year of High School Geometry or MTH 104 (C or better)
IAI: M1 902

MTH 224 Introduction to Mathematical Analysis (4-0) 4 Hours
Includes analytical geometry and calculus topics such as functions and their graphs, rectangular coordinate systems, limits, differentiation and integration of algebraic, logarithmic and exponential functions. Applications are included along with selected topics from multivariable calculus.
NOTE: A specific electronic graphics calculator is required for this course. Contact EMPS division office for details.
Prerequisite: MTH 122 (C or better) or appropriate score on the Math Placement Test
IAI: M1 900

MTH 225 Introduction to Linear Algebra (3-0) 3 Hours
For engineering students or for students intending to transfer to a university whose calculus sequence includes the topics listed below. Provides an introduction to vector spaces with particular emphasis on Euclidean n-space, matrix algebra and linear transformations. Applications of topics to problems arising in engineering and business. Computer software will be integrated as appropriate.
Prerequisite: MTH 146 (C or better)
Offered spring only.

MTH 227 Ordinary Differential Equations (3-0) 3 Hours
Involves the solving of various ordinary linear and nonlinear differential equations of first and higher order and the solving of systems of differential equations. Methods include separation of variables, various substitution techniques, use of integrating factors, undetermined coefficients, variation of parameters. Laplace transforms, infinite series, and selected numerical methods. Applications include simple harmonic motion, population growth and decay, cooling, L-R-C circuits, and mixing problems. Uniqueness and existence theorems are covered. Computer software and graphing calculators are integrated into the course where appropriate.
Prerequisite: MTH 146 (C or better)
Offered fall and spring only.

MTH 244 Discrete Mathematics (3-0) 3 Hours
Introduction to the mathematical analysis of finite collections and to the mathematical foundations of sequential machines, computer system design, data structures and algorithms. Topics include but are not restricted to sets, counting, recursion, graph theory, trees, networks, Boolean algebras, automata, and formal grammars and languages. This course is a beginning course in the mathematics of computer science.
NOTE: Specific electronic graphics calculator is required for this course. Contact EMPS division office for details.
Prerequisite: MTH 122 (C or better) or appropriate score on the Math Placement Test
IAI: M1 905

MTH 246 Calculus and Analytic Geometry III (4-0) 4 Hours
MTH 246 is a continuation of MTH 146. Topics include plane curves, parametric equations, polar coordinates, vectors in two and three dimensions, multiple integrals, and partial derivatives. Solid analytic geometry topics to include quadric surfaces cylindrical and spherical coordinates and curves in 3-space.
NOTE: Specific electronic graphics calculator is required for this course. Contact EMPS Division office for details.
Prerequisite: MTH 146 (C or better)
IAI: M1 900

MECHANICAL ENGINEERING TECHNOLOGY (MCD)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

MCD 111 Manufacturing Processes (3-0) 3 Hours
A survey course of processes, production procedures and materials used in manufacturing are studied; casting, machining, forging, rolling, treatment and production of engineering materials.

MCD 112 Basic Metallurgy I (3-0) 3 Hours
Introduction to the study of metals with emphasis on their physical and mechanical properties relating to applications including metal forming, heat treatment and surface treatment of carbon and alloy steels.

MCD 113 Basic Metallurgy II (3-0) 3 Hours
Continuation of Basic Metallurgy I (MCD 112) with emphasis on cast irons, non-ferrous metals and their alloys. Foundry casting, machining, forming, welding and powder metallurgy processes are treated.
Prerequisite: MCD 112
Offered spring only.
Offered odd years only.

MCD 114 Dimensional Metrology (3-0) 3 Hours
Development of techniques of dimensional measurements as applied to work of skilled trades, inspectors, technicians, drafters and engineers.

MCD 212 Mechanisms (4-0) 4 Hours
Study of motion, velocity, and acceleration as pertaining to the design of gears, linkages, and other mechanical assemblies which transmit or convert motion.
NOTE: Prior completion of Technical Physics (PHY 111) or higher and Technical Mathematics I (MTH 117) or higher are strongly recommended.
Offered spring only.

MCD 213 Statistics and Quality Control (3-0) 3 Hours
Statistical methods for quality control and other industrial problems. Development of sampling plans, control charts and quality/costs studies.
NOTE: Completion of MTH 117 is strongly recommended.

MCD 214 Mechanical Design and Drafting (2-2) 3 Hours
Design and graphic representation of basic machine parts such as gears, cams, castings, and stampings, redesign of simple mechanisms, piping drawing, and welding representation.
NOTE: Student must furnish basic required equipment.
Prerequisite: EGR 121 or DFT 111
Course fee
Offered fall only.

MCD 215 Machine Design (5-0) 5 Hours
The application of empirical and analytical techniques used in the design of mechanical components to safely and effectively transmit force and motion are developed. Combined states of stress using Mohr's Circle, design criteria (including maximum shear stress Mises-Hencky strain energy and fatigue) and the design and analysis of mechanical elements (including clutches, brakes, belts, chains, bearings, fasteners, gearing, springs and cams) are developed.
Prerequisite: EGR 215
Offered spring only.

MCD 219 Plant Layout and Materials Handling (3-0) 3 Hours
Relationship between good plant layout and efficient materials handling. Selection and arrangement of production machinery, product and process layout schemes, techniques of making layouts.
NOTE: Completion of MTH 117 is strongly recommended.

MEDICAL IMAGING (MIM)

Biological & Health Sciences Division, Room C140, (847) 543-2042

MIM 110 Introduction to Medical Imaging (3-0) 3 Hours
Provides a basic understanding of the role of medical imaging in the health care delivery system. The student will develop basic skills in proper body mechanics, methods of transporting and assisting patients, and gain an understanding of aseptic technique and infection control.
Prerequisite: Language and Math Proficiency
Course fee

MIM 111 Radiographic Anatomy and Positioning I (4-2) 5 Hours
Includes a study of the radiographic anatomy and examination procedure for the chest, abdomen, digestive and urinary tracts, and distal upper and lower extremities. Students will learn how to read various types of technique charts and program the x-ray units for correct exposures for these examinations.
Prerequisite: Language and Math Proficiency
Course fee

MIM 112 Principles of Radiographic Exposure (2-2) 3 Hours
Covers the factors that control the production of a radiographic image and provides a basic understanding of radiation protection.
Prerequisite: Admission to the Medical Imaging Program
Corequisite: MIM 110 and MIM 111
Course fee

MIM 113 Radiographic Anatomy and Positioning II (4-2) 5 Hours
Includes a study of the radiographic anatomy and examination procedure for the proximal upper and lower extremities and the axial skeleton. Students will learn how to read various types of technique charts and program the x-ray units for correct exposures for these examinations.
Prerequisite: MIM 112 (C or better)
Course fee

MIM 114 Clinical Practice I (0-16) 3 Hours
Supervised competency based clinical practice. Emphasis on routine chest; abdomen, including examinations of the digestive system, urinary tract, and biliary collecting system; and appendicular skeleton.
Prerequisite: MIM 112 (C or better)
Corequisite: MIM 113
Course fee

MIM 115 Clinical Practice II (0-16) 3 Hours
Supervised competency based clinical practice. Emphasis on routine examinations of the appendicular and axial skeleton.
Prerequisite: MIM 114 (C or better)
Course fee

MIM 116 Advanced Radiographic Procedures (1-0) 1 Hour
Studies the special radiographic procedures routinely performed in the majority of radiology departments. Includes identification of the contrast agents, anatomical structures investigated, and examination procedures.
Prerequisite: MIM 114 (C or better)
Corequisite: MIM 115
Course fee

MIM 170 Introduction to the Clinical Education Center (0-8) 1 Hour
This course is an introduction to the Medical Imaging department and clinical practice. The student will become familiar with the physical plant and protocols of the clinical education center where he/she will receive clinical experience. The course will include supervised performance of routine radiographic examinations of the chest, abdomen, and appendicular skeleton.
Corequisites: MIM 111 and MIM 112
Course fee

MIM 210 Technical Aspects of Patient Care (2-0) 2 Hours
Surveys patient communication. Acute situations, trauma radiography, contrast media, and pharmacology are emphasized.
Prerequisite: MIM 115, MIM 116 (C or better in both) and BIO 124
Course fee

MIM 211 Imaging Equipment (5-2) 6 Hours
Covers mechanical and electrical physics applied to x-ray equipment and factors affecting x-ray emission. Survey of digital vascular radiography and interventional procedures. Labs and discussions in principles of radiographic exposure and image evaluation are included.
Prerequisite: MIM 115, MIM 116 (C or better in both) and BIO 124
Course fee

MIM 212 Clinical Practice III (0-18) 3 Hours
Supervised clinical practice. Emphasis on routine special procedures, surgical, trauma, and mobile radiography. Observations and practice in vascular and interventional procedures are included.
Prerequisite: MIM 115, MIM 116 (C or better in both) and BIO 124
Course fee

MIM 213 Medical Imaging Pathology (2-0) 2 Hours
Includes etiology and processes of trauma and disease. The emphasis is placed on radiographic pathology of body systems. Pathology seen with computed tomography, ultrasound, and magnetic resonance imaging is discussed.
Prerequisite: MIM 116 (C or better)
Course fee

MIM 214 Advanced Topics in Radiography (5-2) 6 Hours
Surveys radiation therapy and nuclear medicine. Radiation biology, radiation regulations, radiation measurements, pediatric and geriatric radiography, and sensitometry and quality control are included. Labs and lectures include principles of radiographic exposure, quality control, and film critique.
Prerequisite: MIM 211, MIM 212, and MIM 213 (C or better in all three)
Course fee

MIM 215 Clinical Practice IV (0-18) 3 Hours
Supervised competency based clinical practice. Continued emphasis on routine and vascular special procedures, surgical, trauma, and mobile radiography. Includes orientation rotations to advanced imaging modalities and completion of course and terminal program competencies.
Prerequisite: MIM 211, MIM 212, and MIM 213 (C or better in all three)
Course fee

MIM 216 Computed Imaging (2-0) 2 Hours
Covers computer anatomy and functions related to computed tomography and magnetic resonance imaging. Includes physics and basic imaging parameters of these modalities. Case studies will be presented.
Prerequisite: MIM 211, MIM 212, and MIM 213 (C or better in all three)

MIM 217 Applied Radiation Biology (1-0) 1 Hour
Surveys the somatic and genetic effects of ionizing radiation.
Prerequisite: MIM 116 (C or better)

MIM 218 Survey of Radiology Administration (1-0) 1 Hour
Surveys the structure and function of the radiology department and its relation to the hospital and the health care consumer.
Prerequisite: MIM 113 (C or better)

MIM 219 Radiography Seminar (2-0) 2 Hours
Review and discussion of radiographic principles, techniques, and methods. Emphasis is placed on the interdependence of theory and principles.
Prerequisite: MIM 211 and MIM 212 (C or better in both)

MIM 271 Clinical Practice V (0-16) 3 Hours
Supervised competency based clinical practice. Emphasis continued on routine and non-routine radiographic procedures. Students will complete all competencies not previously demonstrated. In addition, students will perform a minimum of five competencies previously demonstrated and selected at random from those required for eligibility for certification by the American Registry of Radiologic Technologists.
Prerequisites: MIM 214, MIM 215, and MIM 216 (C or better in each)
Course fee

MEDICAL LABORATORY TECHNOLOGY (MLT)

Biological & Health Sciences Division,
Room C140, (847) 543-2042

MLT 110 Introduction to Medical Lab Technology (1-2) 2 Hours
Introduces the roles of medical laboratory personnel in the health care system. Includes professionalism, communication, basic laboratory math, medical ethics, CLIA-waived testing, legal implications of laboratory testing, and educational preparation and certification of laboratory personnel.
Prerequisite: Language and Math Proficiency
Course fee

MLT 111 Immunology (1-2) 2 Hours
Presents theory and practical experiences in laboratory immunology. Stresses phlebotomy and explains the functioning of a normal and abnormal immune system. Students will learn how immunology testing utilizes antigen-antibody reactions in the diagnosis and treatment of disease. Reviews lab safety and quality control.
Prerequisite: Admission to the Medical Lab Technology Program
Corequisite: MLT 110 and MLT 114
Course fee

MLT 112 Hematology and Coagulation (3-6) 6 Hours
Designed to prepare students to develop an understanding of the fundamental theoretical principles and concepts of hematology and hemostasis, to perform manual and automated hematology and coagulation procedures, and to correlate test results with physiological and disease processes. Presents an overview of assessment procedures and techniques that are most widely used in hematology and coagulation, principles and application of quality control procedures, and laboratory safety.
Prerequisite: MLT 110, MLT 111, MLT 114 (C or better in each)
Corequisite: MLT 113
Course fee

MLT 113 Immunohematology (2-4) 4 Hours
Designed to prepare students to develop an understanding of the fundamental principles of immunohematology and to perform routine pre and post transfusion lab procedures. The study of red blood cell antigen and antibody reactions, the techniques that are most widely used in immunohematology laboratory to detect potential problems associated with transfusion therapy, principles and application of quality control procedures, and laboratory safety are presented.
Corequisite: MLT 112
Course fee

MLT 114 Body Fluid Analysis (1-2) 2 Hours
Introduction to body fluid analysis including urine, CSF, amniotic fluid, and synovial fluid. Test procedures in basic body fluid analysis and their correlation to disease processes are included. Laboratory safety and quality control are emphasized.
Corequisite: MLT 110 and MLT 111
Course fee

MLT 115 Phlebotomy Techniques (1-2) 2 Hours
Focuses on development of skills in performing phlebotomy procedures. Includes proper use of equipment, current safety standards, medical and legal policies and regulations, interpersonal and communication skills, and correct specimen collection, transport, and preparation for laboratory testing.
Prerequisite: MLT 110 (C or better)
Course fee

MLT 116 Clinical Phlebotomy (0-7) 2 Hours
Provides the student with supervised clinical practice of current phlebotomy techniques. Students will develop skill in performing phlebotomy procedures in various health care settings. Includes proper use of equipment, current safety standards, medical and legal policies and regulations, interpersonal skills, and correct transport, collection, and preparation for laboratory testing.
Prerequisite: MLT 110 and MLT 115 (C or better in both)
Course fee

MLT 210 Clinical Chemistry (3-4) 5 Hours
This course is designed to prepare students to develop an understanding of the fundamental principles of clinical chemistry; to perform manual and automated chemistry procedures on body fluids; and to correlate, validate, and verify the test results to physiological changes and disease processes for the purpose of aiding in the screening, diagnosis, and monitoring of disease processes. It is an overview of analytical techniques that are most widely used in a clinical chemistry laboratory, principles and application of quality control procedures, and laboratory safety.
Prerequisites: MLT 112 and MLT 113 (C or better in both) and CHM 123
Corequisite: MLT 213
Course fee

MLT 213 Clinical Microbiology (3-4) 5 Hours
Prepares students to perform microbiological procedures on all body fluids and secretions for the purpose of identification of relevant microorganisms using cultural, morphological, and chemical methods. Quality control and laboratory safety are stressed.
Prerequisites: MLT 112 and MLT 113 (C or better in both) and BIO 125
Corequisite: MLT 210
Course fee

MLT 271 Chemistry Practicum (0-7) 2 Hours
Supervised clinical chemistry instruction in a hospital setting. Emphasis is on routine chemistry procedures. Quality Control, instrumentation, and computer applications are highly stressed. Includes review sessions, integration of lab knowledge and skills, and professional growth.
NOTE: Four days will be spent at the clinical site. Friday mornings will be spent at the college in a review session.
Prerequisite: MLT 210 and MLT 213 (C or better in both)
Course fee

MLT 272 Hematology Practicum (0-7) 2 Hours
Supervised clinical hematology instruction in a hospital setting. Emphasis is on routine hematology procedures. Quality Control, instrumentation, and computer applications are highly stressed. Includes review sessions and integration of lab knowledge and skills.
NOTE: Four days will be spent at the clinical site. Friday mornings will be spent at the college in a review session.
Prerequisite: MLT 210 and MLT 213 (C or better in both)

MLT 273 Immunohematology Practicum (0-7) 2 Hours
Supervised immunohematology clinical instruction in a hospital setting. Emphasis is on routine and specialized immunohematology procedures. Instrumentation and computer work is also highly stressed. Includes review sessions, integration of lab knowledge and skills, professional growth, job placement, and resume writing.
NOTE: Four days will be spent at the clinical site. Friday mornings will be spent at the college in a review session.
Prerequisite: MLT 210 and MLT 213 (C or better in both)

MLT 274 Microbiology Practicum (0-7) 2 Hours
Supervised clinical microbiology instruction in a hospital setting. Emphasis is on routine and specialized chemistry procedures. Instrumentation and computer work is also highly stressed. Includes review sessions, integration of lab knowledge and skills, professional growth, job placement, and resume writing.
NOTE: Four days will be spent at the clinical site. Friday mornings will be spent at the college in a review session.
Prerequisite: MLT 210 and MLT 213 (C or better in both)

MLT 275 Serology, Body Fluids, Phlebotomy Practicum (0-7) 2 Hours
Supervised clinical serology/body fluids/phlebotomy instruction in a hospital setting. Emphasis is on routine and specialized serology/body fluids/phlebotomy procedures. Instrumentation and computer work is also highly stressed. Includes review sessions, integration of lab knowledge and skills, professional growth, job placement, and resume writing.
NOTE: Four days will be spent at the clinical site. Friday mornings will be spent at the college in a review session.
Prerequisite: MLT 210 and MLT 213 (C or better in both)

MULTIMEDIA COMMUNICATIONS (COM)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

COM 111 Introduction to Multimedia (3-0) 3 Hours
Designed for beginners, course content is geared toward potential producers, educators, business people, and home-based users. We'll explore the variety of hardware and software now used to produce multimedia, from simple audience-oriented presentations to highly interactive CD ROM programs. Through lectures, demonstrations, and hands-on laboratory experience, we'll examine the production techniques, application uses, trends, business and legal concerns, design elements, and the product evaluation standards currently used in the multimedia industry. Students will develop the design, storyboards, and prototype for a project.
Course fee

COM 112 Multimedia Platforms (3-0) 3 Hours
Multimedia Platforms is a "start here" course for anyone interested in an umbrella introduction to the latest in multimedia hardware, software, and operating systems. Designed for first time home users, students, or business people, this course offers a hands-on overview of the basics in how personal

computer systems work, major software genres, PC information resources, and multimedia peripherals. Hardware topics include computer-system terminology, monitors, printers, scanners, CD ROMs, modems, networks, sound and video cards, mouse operations, multimedia equipment, and utility accessories. Software topics include basic operating systems (DOS and Windows), and major types of special application and utility programs. We'll also cover system maintenance, networks, BBS access, desktop conferencing and how to customize, integrate, and manage exactly the type of computer system for your needs.
Course fee

COM 115 Internet Fundamentals (3-0) 3 Hours
Addresses in detail everything you need to know to access, explore, and use the world's richest information resource: the Internet. The course examines software, online provider options, costs, the telecommunication process, E-mail, Telnet, FTP, Chat, Gopher, Usenet, and the World Wide Web. You will get step by step instructions on how to access, research and retrieve academic, personal and professional information. You will learn how to send and receive messages; visit the data resources of the major universities, governments and world organizations; talk live to people anywhere; access and download useful files and programs; visit or join thousands of special interest news groups; sit in on online university courses; and go browsing for career or business opportunities.
Course fee

COM 116 Developing Web Pages (3-0) 3 Hours
This course is a thorough coverage of developing web pages with HTML. Students will use the HTML language to develop web pages that could be used in any professional setting. Students will examine page and site design concepts with an emphasis on interface design for good navigation. Style rules and Style sheets will be introduced and used in pages developed for classes. Students will also examine the technology of JavaScript and Java applets and include both in assigned pages.
Course fee

COM 171 Introduction to Computer Graphics (0-6) 3 Hours
This is a hands-on introductory course in the creation and development of computer graphic images. Through a series of applied practical projects, the student will be introduced to and learn to utilize paint, draw, image manipulation and basic animation programs. This introductory course provides anyone who works with computer graphic images an overview and understanding of how to create, import and manipulate a variety of computer generated images.
Course fee
Offered spring only.

COM 215 Multimedia Presentations (3-0) 3 Hours
Designed for entry-level multimedia producers, business people, educators and industry trainers, this course provides in-depth training on how to produce high-quality, full-feature multimedia presentations. Topics include: audience analysis; design considerations; presentation hardware and software platforms; creating , modifying, acquiring and using multimedia elements (text, graphics, photographs, animation, video and sound); hyperlinking to other programs; and employing special program effects. Supervised lab time centers on applying lecture topics to two of your end -of- term presentation projects.
Prerequisite: COM 111 and COM 112
Course fee
Offered fall only.

COM 216 Advanced Online Publishing (3-0) 3 Hours
This course is geared toward web page designers who need to incorporate advanced control management and interactive elements into their web pages through scripting languages. Students will use the JAVA language to write their own scripts for their web pages which will provide functions such as interactivity, create software to read and manipulate forms, and set "Cookies" to record information on users visiting a site. Advanced features of Netscape and Microsoft Internet Explorer will be introduced and used in web pages.
Prerequisite: COM 115 and COM 116
Course fee

COM 217 Multimedia Authoring (3-0) 3 Hours
This course is geared toward multimedia designers who will be creating kiosks, CD ROM software, marketing and educational software, and interactive sites. Students will use a popular authoring software package to create an interactive multimedia presentation. The design, storyboarding, prototyping, testing and production techniques for creating a multimedia package will be followed with the final project.
Prerequisite: COM 115 and COM116 and COM 215

COM 218 Building Commercial Websites (3-0) 3 Hours
This course provides information and skills for students seeking to create web sites with secure transactions, information transfer, and promotions. Students will set up sites using commercial software designed specifically for Online Commerce and can decide to continue the portfolio assignment as an actual presence for an organization. Students must already have web page development skills.
Prerequisite: COM 115 and COM 116

COM 219 Building Instructional Websites (3-0) 3 Hours
Students will examine the application of instructional design to teaching through an Internet or Intranet. Students will be creating advanced web pages for use in a training or educational setting, examining methods of creating interactive learning experiences and examining methods to integrate learning strategies into online course material.
Prerequisite: COM 111 and COM 115 and COM 116

COM 299 Selected Topics in Multimedia (Variable) 1-3 Hours
This course is designed to meet the needs of students for specialized instruction in current multimedia topics. Topics will be identified for each section of the course. Credit will be from one to three hours depending upon the topic.
May be taken four times, but any topic only once

MUSIC (MUS)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

MUS 120 Vocal Ensembles (0-2) 1 Hour
Understanding and enjoyment of choral music. Student may choose the Gospel Choir, CLC Singers, or Choir of Lake County.
NOTE: The CLC Singers requires an audition.
Course fee
May be taken four times for credit toward degree

MUS 121 Voice Class I (1-1) 1 Hour
Introduction to singing techniques beginning with group singing and gradually introducing solo singing. No vocal background is needed. For non-music majors.
Course fee

MUS 122 Voice Class II (1-1) 1 Hour
Introduction to singing techniques with emphasis on repertoire. A continuation of MUS 121.
Prerequisite: MUS 121
Course fee

MUS 123 Wind Ensemble (0-2) 1 Hour
Understanding and enjoyment of instrumental music through selected examples of standard instrumental ensemble literature of all periods.
Course fee
May be taken four times for credit toward degree

MUS 124 Introduction to Music (3-0) 3 Hours
A non-technical listening course emphasizing recognition and understanding of various styles of serious music, past and present.
IAI: F1 900

MUS 126 Music Skills for Classroom Teachers (3-0) 3 Hours
An introduction to basic instrumental and vocal skills for use in general teaching. Intended for non-music majors.

MUS 127 Fundamentals of Music (2-0) 2 Hours
Provides background to understand language of music of various style periods. Study of notation, rhythm, scales, intervals, chords, and musical terms using keyboard as an aid. Preparation for MUS 128 and a practical course for classroom teachers.
NOTE: Students should combine this course with Piano Class I (Mus 145, 1 credit hour).

MUS 128 Theory of Music I (4-0) 4 Hours
A concentrated study of musical language including analysis, recognition, and writing of chords and harmonic progressions. Ear- training and sight- reading are also offered.
NOTE: Students without keyboard background should combine this course with Piano Class I (Music 145). Students without theory preparation may take Fundamentals of Music (Music 127) concurrently.

MUS 129 Theory of Music II (4-0) 4 Hours
Written four-part harmony, analysis of form and harmony, dominant #7 chord and continuation of ear training. Continuation of MUS 128.
Prerequisite: MUS 128

MUS 140 20th Century Music (3-0) 3 Hours
A non-technical listening course emphasizing recognition and understanding of various styles of 20th century music including jazz and popular music. Emphasis placed on music through recordings, scores, and performance of representative works of each period. Comparison of styles and consideration of music in relation to other fine arts and to the general historical background.
IAI: F1 902

MUS 141 Applied Music-Voice I (Variable) 1-2 Hours
This course is designed for the vocalist who is a beginner or advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis.
NOTE: No more than 4 credit hours earned in MUS 141, MUS 143-144, MUS 160-169, MUS 180-188, MUS 241, MUS 243-244 and MUS 260-288 will count toward an associate degree in arts or science.
Course fee
May be taken 4 times for max. of 4 hrs. toward deg

MUS 143 Applied Music Piano I (Variable) 1-2 Hours
This course is designed for the instrumentalist who is a beginner or advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis.
NOTE: No more than 4 credit hours earned in MUS 141, MUS 143-144, MUS 160-169, MUS 180-188, MUS 241, MUS 243-244 and MUS 260-288 will count toward an associate degree in arts or science.
Course fee
May be taken 4 times for max. of 4 hrs. toward deg

MUS 144 Applied Music Jazz Piano (Variable) 1-2 Hours
This course is designed for the instrumentalist who is a beginner or advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis.
NOTE: No more than 4 credit hours earned in MUS 141, MUS 143-144, MUS 160-169, MUS 180-188, MUS 241, MUS 243-244 and MUS 260-288 will count toward an associate degree in arts or science.
Course fee
May be taken 4 times for max. of 4 hrs. toward deg

MUS 145 Piano Class I (1-1) 1 Hour
An introduction to basic playing, keyboard chords, and music reading. Interpretation of various music styles is considered. For beginners or those who have not studied for a considerable time.
NOTE: Students should combine this course with Fundamentals of Music (MUS 127).
Course fee

MUS 146 Piano Class II (1-1) 1 Hour
A continuation of MUS 145. Provides additional opportunity for study and practice of more advanced compositions for piano.
Prerequisite: MUS 145
Course fee

MUS 147 Guitar Class I (1-1) 1 Hour
Introduction to the fundamentals of the guitar for development of playing skills, reading, improvisation and technique. Explores the use of music theory as it relates to the guitar in terms of keys, chord construction and progression. Emphasis on variety of songs and historical styles for repertoire development.
NOTE: MUS 127 Fundamentals of Music is strongly recommended as a companion couse for students who need work in reading pitches and rhythms.
Course fee

MUS 148 Guitar Class II (1-1) 1 Hour
A continuation of MUS 147. It develops and advances skills learned and introduces new concepts and techniques.
Prerequisite: MUS 147
Course fee

MUS 160-188 Applied Music - Instrumental I (Variable) 1-2 Hours
This course is designed for the instrumentalist who is a beginner or advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis.
NOTE: No more than 4 credit hours earned in MUS 141, MUS 143-144, MUS 160-169, MUS 180-188, MUS 241, MUS 243-244 and MUS 260-288 will count toward an associate degree in arts or science.
Course fee
May be taken 4 times for max. of 4 hrs. toward deg

MUS 223 Jazz Ensemble (0-2) 1 Hour
Understanding and enjoyment of instrumental music through selected examples of standard instrumental ensemble literature of all periods.
Prerequisite: Jazz Ensemble audition
Course fee
May be taken four times for credit toward degree

MUS 224 Music Literature (3-0) 3 Hours
The historical development of western music, including various musical styles and periods and the contribution of key composers in shaping the western musical tradition.
IAI: F1 902

MUS 228 Theory of Music III (4-0) 4 Hours
Continuation of MUS 129. Advanced study of musical language including chromatic chords, seventh chords, and modulation.
Prerequisite: MUS 129

MUS 229 Theory of Music IV (4-0) 4 Hours
Continuation of MUS 228. Twentieth Century musical techniques are considered.
Prerequisite: MUS 228

MUS 241 Applied Music-Voice II (Variable) 1-2 Hours
This course is designed for the instrumentalist who is a beginner or advanced and intends to become seriously involved

with music. This is a course of independent study on a private lesson basis.
NOTE: No more than 4 credit hours earned in MUS 141, MUS 143-144, MUS 160-169, MUS 180-188, MUS 241, MUS 243-244 and MUS 260-288 will count toward an associate degree in arts or science.
Course fee
May be taken 4 times for max. of 4 hrs. toward deg

MUS 243 Applied Music-Piano II (Variable) 1-2 Hours
This course is designed for the instrumentalist who is a beginner or advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis.
NOTE: No more than 4 credit hours earned in MUS 141, MUS 143-144, MUS 160-169, MUS 180-188, MUS 241, MUS 243-244 and MUS 260-288 will count toward an associate degree in arts or science.
Course fee
May be taken 4 times for max. of 4 hrs. toward deg

MUS 244 Applied Music-Jazz Piano II (Variable) 1-2 Hours
This course is designed for the instrumentalist who is a beginner or advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis.
NOTE: No more than 4 credit hours earned in MUS 141, MUS 143-144, MUS 160-169, MUS 180-188, MUS 241, MUS 243-244 and MUS 260-288 will count toward an associate degree in arts or science.
Course fee
May be taken 4 times for max. of 4 hrs. toward deg

MUS 245 Piano Class III (1-1) 1-2 Hours
Continuation of MUS 146. More advanced keyboard techniques, use of pedals, improvisation and functional piano. Music reading of all periods.
Prerequisite: MUS 146
Course fee

MUS 246 Piano Class IV (1-1) 1 Hour
Continuation of MUS 245. The highest level of advancement in piano class. Increased skills in all piano techniques.
Prerequisite: MUS 245
Course fee

MUS 260-288 Applied Music Instrumental II (Variable) 1-2 Hours
This course is designed for the instrumentalist who is a beginner or advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis.
NOTE: No more than 4 credit hours earned in MUS 141, MUS 143-144, MUS 160-169, MUS 180-188, MUS 241, MUS 243-244 and MUS 260-288 will count toward an associate degree in arts or science.
Course fee
May be taken 4 times for max. of 4 hrs. toward deg

NURSING (NUR)

Nursing Education, Room D208, (847) 543-2340

NUR 110 Nurse Assisting (6-3) 7 Hours
Meets state requirements for preparation for employment in long-term care facilities. Participants must be at least 16 years of age, must speak and read English, and have at least an 8th grade education. The lecture portion of the course is held at the Lakeshore Campus or the Grayslake Campus, depending upon the section in which the student is enrolled. Clinical training for all students will be held on selected days throughout the course at various long-term care facilities in the community. Students not attending the first day of class will be dropped from enrollment. Attendance at each scheduled class and clinical laboratory is mandatory. The State of Illinois requires a UCIA Criminal Background Check on all enrolled students. Upon successful completion of this course, the student will be eligible to take the state mandated written competency examination for Nurse Assistant Certification.
Prerequisite: Language proficiency or high school diploma or GED or Adult Education reading test or Basic Skills Assessment Test or ENG 93 or ENG 108 or ENG 109 or ENG 121 and 16 years of age.
Course fee

NUR 171 Nursing: Universal Self-Care (3-12) 7 Hours
Focuses on universal self-care requirements and behaviors and the nursing process with emphasis on assessment of universal self-care demands, abilities, and limitations. In both simulated and clinical laboratory settings the student uses the nursing helping methods of doing, supporting, guiding, teaching, and providing a developmental environment with clients having few to moderate self care agency limitations. Focuses on clinical decision making and caring interventions required by these clients. Introduces the student to the health care system, the role of the nurse and professional behaviors. Problem based instruction and mastery learning techniques are used: proficiency examinations are available.
Prerequisite: Admission to the Associate Degree Nursing Program
Course fee

NUR 172 Nursing: Developmental Self-Care (3-12) 7 Hours
Building upon NUR 171, this course focuses on developmental self-care, changes in developmental self-care demands and abilities, and common hazards to life and well-being during each of the major developmental stages of the life span. Views the client as a member of a unit with caregiver support and the health care system focused at developmental self-care. In both simulated and clinical laboratory settings, the student applies the nursing process using helping methods for clients with moderate self-care agency limitations. Focuses on clinical decision making and caring interventions needed by these clients. Opportunity provided to participate in client centered

conferences and to collaborate with other health care workers. Problem based instruction and mastery learning techniques are used. Proficiency examinations are available.
Prerequisite: NUR 171 and BIO 124 (C or better in both)
Course fee

NUR 173 Concepts for Role Transition (1-1) 2 Hours
The course is designed to provide students with concepts needed for the licensed practical nurse's transition to the Associate Degree Program in Nursing. The concepts identified will provide the student with the information necessary for upward mobility in NUR 271. Content will focus on the registered nurse's role in client assessment, nursing diagnosis, planning, intervention, evaluation and documentation. Clinical decision making collaboration and caring interventions as well as nursing helping methods are integrated into this course.
Prerequisites: Graduate of a state approved LPN program within the last five years, and admitted to the NUR Program, and BIO 124 (C or better)

NUR 271 Nursing: Health-Deviation Self-Care I (3-18) 9 Hours
Building upon NUR 172, this course focuses on the client's health-deviation self-care demands and responses to acute and chronic health problems. Includes the impact of health deviation on universal self-care and developmental self-care for clients and families in the health care system. In both simulated and clinical laboratory settings the student applies the nursing process and uses clinical decision making as well as helping methods and caring interventions for clients with moderate to severe self-care agency limitations. Opportunity to work collaboratively in care planning with nursing team members is provided. Problem based instruction and mastery learning techniques are used: proficiency examinations are available.
Prerequisite: NUR 172 and BIO 125 (C or better in both) and SPE 127
Course fee

NUR 272 Nursing: Health-Deviation Self-Care II (3-18) 9 Hours
Builds on NUR 271 and focuses on the client's health deviation self-care demands and responses to multiple and complex health problems. Includes emphasis on health deviation requiring long term and chronic care management. In both simulated and clinical laboratory settings, the student applies the nursing process and uses clinical decision making, as well as helping methods and caring interventions for clients with moderate to severe self-care agency limitations. The role of the nurse as a manager of care, collaborator in clinical decision making and care planning is a focus. Opportunity to participate in community support groups and client centered conferences is provided. Introduces student to the use of research in nursing. Issues faced in transition to practice as a registered nurse are addressed. Problem based instruction and mastery learning techniques are used.
Prerequisite: NUR 271 (C or better)
Course fee

PERSONAL DEVELOPMENT (PDS)

Counseling Center, Room C110, (847) 543-2060

PDS 120 Becoming A Successful Student (Variable) 1-2 Hours
Designed to train students in a number of attitudes and skills that are valuable for school success: goal setting, time management, memory development, notetaking, textbook reading strategies, test-taking, library use, school resources, motivation and stress management. Involves extensive reading and homework assignments since intensive practice is required for mastery. One credit hour options are offered on special topics such as test or speech anxiety. This course may not be audited.
Prerequisite: Language Proficiency
OR
Corequisite: ENG 108 or ENG 109
May be taken four times, but any topic only once

PDS 121 Self-Empowerment (1-0) 1 Hour
This course empowers students to become more aware of self by identifying personal strengths and values in order to resolve conflicts and set goals.Students will work in a structured setting to reinforce one another's positive attributes. With increased personal understanding, they are empowered to achieve appropriate goals. This seminar is especially valuable for students who seek more self-confidence and motivation to live a more fulfilled life at home, at work, in college-but most of all, within themselves. This course may not be audited.

PDS 122 Career Exploration (1-0) 1 Hour
Assists participant, with aid of a counselor, to explore possible career choices. Participant is helped to analyze his own potentialities and to develop projected life-style. Occupational choices and trends explored. Participant matches his potential with available job market as he specifies action-plan of self-development to attain his career goals. Finally, participant learns how to enter employment field as he studies how he can best market his realized potential.

PDS 123 Human Relations (1-0) 1 Hour
A laboratory experience in affective education in which the student gains increased awareness of and sensitivity to emotional reactions and experiences in himself and others. Designed to provide students with both positive and negative feedback from other students. Feedback concerned with students' behaviors, attitudes, emotions and values as observed by fellow group members. Some sections (when specified) will focus on special topics, i.e. race relations, multi-cultural issues. This course may not be audited.

PHILOSOPHY (PHI)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

PHI 121 Introduction to Philosophy (3-0) 3 Hours
Discusses the ideas of major philosophers concerning questions of human knowledge, logic, moral values, political and social philosophy, and religious beliefs. Attempts are made to get students to think out their own answers to these questions.
Prerequisite: Language Proficiency
IAI: H4 900

PHI 122 Logic (3-0) 3 Hours
Formal reasoning, including categorical and symbolic modes of analysis. Covers Venn diagrams, predicate logic, rules of inference and replacement. Introduces the inductive method and the problem of induction.
Prerequisite: Language Proficiency
IAI: H4 906

PHI 123 Philosophy of Religion (3-0) 3 Hours
A study of selected religious concepts and theories, such as the existence of God, the nature of good and evil, faith and reason, ethics and the afterlife. May include an examination of the nature of religious language and experience.
Prerequisite: Language Proficiency
IAI: H4 905

PHI 125 Introduction to Ethics (3-0) 3 Hours
Discussion of contemporary moral issues which may include sexual morality, homosexuality, women's rights, animal rights, environmental ethics, abortion, euthanasia, nuclear war, famine and population. An attempt is made to find solutions to these problems in terms of ethical theory.
Prerequisite: Language Proficiency
IAI: H4 904

PHI 129 Philosophical Issues in Contemporary Feminism (3-0) 3 Hours
A study of the questions of whether there is a distinction between masculine and feminine character, whether one's sex imposes moral obligations or rights, what might be meant by the "equality of the sexes," and what effect sexual equality may have on the institutions of marriage, the family, personal relations. Both classical and contemporary philosophical writers will be read.
Prerequisite: Language Proficiency

PHYSICAL EDUCATION (PED)

Biological & Health Sciences Division, Room C140, (847) 543-2042

PED 121 Individual Sports I (Variable) 0.5-1 Hour
The demonstration and instruction of skills and techniques in individual sports. Participation in these sports and instruction in the rules and strategies involved.
NOTE: No more than 4 credit hours earned in PED 121 and/or PED 127 will count toward an associate degree. Students should consult the class schedule for sports offered during a particular semester.
May be taken four times for credit toward degree

PED 123 Team Sports I (Variable) 0.5-1 Hour
Group instruction in a variety of team sports, including techniques of play, strategy, and rules. Provides group instruction and experience in a variety of team sports. Emphasis on participation. Sports offered include basketball, volleyball, softball, and baseball.
NOTE: No more than 1 credit hour earned in PED 123 will count toward an associate degree. Students should consult the class schedule for sports offered during a particular semester.
May be taken four times for credit toward degree

PED 127 Restricted Activity (0-2) 1 Hour
Fitness or recreation activities for students restricted by health limitations. Includes individual programs adapted to meet specific requirements.
NOTE: No more than 4 credit hours earned in PED 121 and/or PED 127 will count toward an associate degree. Students should consult the class schedule for sports offered during a particular semester.
May be taken four times for credit toward degree

PED 128 Introduction to Recreation (3-0) 3 Hours
This course is designed to introduce the student to the historical and philosophical aspects of recreation and the factors that influence use of leisure time. The nature, scope, and importance of recreational activities in a school and community setting are covered along with program development for the various age groups. *NOTE:* Students will spend lab time in local elementary schools during the second half of the semester.
Prerequisite: Language Proficiency

PED 129 Fundamentals of Youth Programming (4-0) 4 Hours
This course takes you through childhood behavior and development, indoor and outdoor group relationships, and creative learning experiences. Outdoor and indoor events are required. Class projects will be graded according to the requirements of the project, and additional class time will be needed. Equipment will be provided for each event. For students going into a career in physical education, recreation, preschool teaching, elementary education, social work, or voluntary agencies.
NOTE: Expenses for group projects ($35-$50) assumed by the students.
Prerequisite: Language Proficiency

PED 140 Contemporary Health Issues (2-0) 2 Hours
Basic human physiology, nature of disease, and principles and problems of personal health.
Prerequisite: Language Proficiency

PED 141 Theory and Practice of Fitness (1-2) 2 Hours
This course is intended to teach students basic physiological concepts of fitness as well as provide regularly scheduled opportunities to develop their aerobic fitness capacities.

PED 148 Recreation Operations (3-0) 3 Hours
An introductory course involving the organizational, management, and administrative aspects of conducting recreational programs and activities.
Prerequisite: Language Proficiency

PED 149 Leisure Sports and Activities (1-2) 2 Hours
An introductory course to discuss, demonstrate, and practice the skills and techniques of various types of recreational games and sports.
Prerequisite: Language Proficiency

PED 220 Physical Education in the Elementary School (2-2) 3 Hours
Designed specifically for classroom teachers, teacher aides, and elementary physical education majors. Curriculum, materials, and progression of activities in elementary school physical education is discussed, demonstrated, and practiced.
NOTE: Students will spend lab time in local elementary schools during the second half of the semester.
Prerequisite: Language Proficiency

PED 221 Introduction to Physical Education (2-0) 2 Hours
An introduction to the professional field of physical education. An understanding of the role of physical education in the total education program. A study of the objectives of physical education with emphasis on physical fitness and social development.
Prerequisite: Language Proficiency

PED 222 Coaching Strategies in Basketball (2-0) 2 Hours
A professional course in physical education with emphasis on coaching philosopy, techniques, and strategies. Methods of teaching individual skills, organization of practice session, and an understanding of offensive and defensive team strategies will be covered.
Prerequisite: Language Proficiency

PED 223 Coaching Strategies in Football (2-0) 2 Hours
This course is designed to instruct students in the basic offensive and defensive schemes, terminologies, scouting "breakdown" and analyses, special teams, offensive and defensive philosophies, and staff hiring practices.
Prerequisite: Language Proficiency

PED 224 Coaching Strategies in Baseball (2-0) 2 Hours
A professional course in physical education with emphasis on coaching philosophy, techniques and strategies. Methods of teaching individual skills, organization of practice sessions, and an understanding of offensive and defensive team strategies will be covered.
Prerequisite: Language Proficiency

PED 225 Officiating (1-0) 1 Hour
Instruction, practice and examination of officiating or judging techniques for the following sports: men's football, women's basketball, badminton, field hockey, men's basketball, swimming, volleyball, track and field, softball, gymnastics, and tennis.
Prerequisite: Language Proficiency
May be taken four times for credit toward degree

PED 228 First Aid (Variable) 0.5-2 Hours
Intended for those interested in the care and prevention of injuries and is designed to emphasize the principles of safety and first aid. Skills and techniques in first aid are presented along with development of personal practices aimed at reduction of accidents.
May be taken four times for credit toward degree

PED 229 Experience in the Out-of-Doors (Variable) 2-3 Hours
Extends the classroom into the out-of-doors. Outdoor experiences are provided in a variety of natural areas through field trips. Instructional emphasis is placed on how to move through these areas with minimum environmental impact and how to live within them through various outdoor activities such as camping and hiking.
NOTE: No more than 3 credit hours may count toward an associate degree.
Course fee
May be taken twice, but any topic only once

PED 240 Coaching Strategies in Softball (2-0) 2 Hours
A professional course in physical education with emphasis on coaching philosophy, techniques and strategies. Methods of teaching individual skills, organization of practice sessions, and an understanding of offensive and defensive team strategies will be covered.
Prerequisite: Language Proficiency

PED 241 Coaching Strategies in Volleyball (2-0) 2 Hours
A professional course in physical education with emphasis on coaching philosophy, techniques and strategies. Methods of teaching individual skills, organization of practice sessions, and an understanding of offensive and defensive team strategies will be covered.
Prerequisite: Language Proficiency

PED 242 Philosophy of Coaching (Variable) 0.5-3 Hours
This course is a study of the essential elements of coaching men and women and boys and girls. It emphasizes the development and analysis of various coaching styles and philosophies, development of individual and team objectives, methods of coaching organization, and various motivational techniques. As such, the course will serve to prepare the student for all aspects of coaching aside from the technical aspects of the particular sport.
Prerequisite: Language Proficiency
May be taken four times, but any topic only once

PED 248 Fieldwork in Recreation (1-20) 4 Hours
Gives students the learning experience of working in public and private recreation programs. This on-the-job training in Lake County recreation agencies provides students with the opportunity to demonstrate acquired recreation skills and knowledge and to continue to develop as a professional recreation person. Includes group seminar sessions with other students and regular meetings with the CLC instructor/supervisor.
Prerequisite: Language Proficiency

PHYSICS (PHY)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

PHY 111 Technical Physics I (3-2) 4 Hours
Study of mechanics and basic properties of matter. Topics covered include forces, motion, work, energy, harmonic motion, elasticity, waves and sound.
Prerequisite: Language Proficiency and MTH 102 or MTH 115
Course fee

PHY 112 Technical Physics II (3-2) 4 Hours
Study of temperature, heat thermodynamics, electricity, magnetism, and optics with an introduction to modern physics. Major topics are electric and magnetic fields, electric circuits, properties of waves, lenses, mirrors, diffraction, photons, and structure of matter.
Prerequisite: PHY 111
Course fee

PHY 115 Applied Physics for Electronics I (2-2) 3 Hours
Provides a broad coverage of the physical principles in mechanics needed to understand basic technology associated with electronics.
Prerequisite: EMF 114 (C or better)

PHY 116 Applied Physics for Electronics II (2-2) 3 Hours
Provides a broad coverage of the physical principles in the areas of matter, heat and thermodynamics, electricity and magnetism, optics and modern physics needed to understand basic technology associated with electronics.
Prerequisite: PHY 115 (C or better)

PHY 120 Practical Aspects of Physics (3-2) 4 Hours
One semester lecture-discussion course supplemented with demonstrations and laboratory designed primarily for non-science students. Stresses some fundamental concepts in physics as applied to everyday situations. Verbal rather than mathematical approach emphasized.
Prerequisite: Language and Math Proficiency
Course fee
IAI: P1 901L

PHY 121 General Physics I (4-2) 5 Hours
First course in a two semester sequence designed for students in arts and sciences. Basic concepts of mechanics, waves and sound are developed through lectures, demonstrations and laboratory experience. Basic knowledge of algebra and geometry assumed.
Prerequisites: MTH 108 (C or better) or an appropriate score on the Math Placement Test or two years of High School Algebra - AND - Language proficiency
Course fee
IAI: P1 900L

PHY 122 General Physics II (4-2) 5 Hours
Second course in a two semester sequence. Basic concepts of heat, thermodynamics, electricity, magnetism and modern physics are developed.
Prerequisite: PHY 121
Course fee

PHY 123 Physics for Science and Engineering I (4-2) 5 Hours
First course in a three semester sequence designed for students in engineering, physics, mathematics and chemistry. Fundamental concepts of mechanics are developed through lecture, demonstration and laboratory experience.
NOTE: MTH 146 is recommended as a corequisite.
Prerequisite: MTH 145
Course fee
Offered fall and spring only.
IAI: P2 900L

PHY 124 Physics for Science and Engineering II (4-2) 5 Hours
Second course in a three semester sequence. Fundamental concepts of heat, electricity, and magnetism are developed.
Prerequisite: PHY 123
Course fee
Offered fall and spring only.

PHY 221 Physics for Science and Engineering III (3-2) 4 Hours
Third course in a three semester sequence. Fundamental concepts of waves, sound, optics, and modern physics developed.
Prerequisite: PHY 124
Course fee
Offered summer only.

POLITICAL SCIENCE (PSC)

Social Science Division, Room A244,
(847) 543-2047

PSC 121 American National Politics (3-0) 3 Hours
This course covers the structures and processes of the federal government. It includes the organization, powers, and responsibilities of the branches of government as contained in the Constitution, the interrelationships among the branches of government, and the factors which influence the policymaking process.
Prerequisite: Language Proficiency
IAI: S5 900

PSC 122 State & Local Politics (3-0) 3 Hours
This course is a survey of governmental structures and political processes in American state and local governments with emphasis on powers, responsibilities, and political behavior of decision-makers at state and local levels.
Prerequisite: Language Proficiency
IAI: S5 902

PSC 221 Comparative Political Systems (3-0) 3 Hours
This course is a study of various governmental systems: democracy, socialism, communism, theocracy, and fascism. Selected countries and the United Nations will be analyzed to familiarize students with the theories and types of these governmental units.
Prerequisite: Language Proficiency
IAI: S5 905

PSC 222 International Relations (3-0) 3 Hours
The course will involve a critical analysis of the cold war and the New World Order. It will emphasize international theory, foreign policy decision-making, past and present global crises, American diplomacy, the new economy, and nuclear arms control in the post cold war era.
Prerequisite: Language Proficiency

PSC 223 Political Campaigns and Elections (3-0)3 Hours
This course covers the historical development and modern strategies of political parties and interest groups in campaigns and elections. Attention is given to an analysis of current elections at the national, state, and local levels.
Prerequisite: Language Proficiency

PSYCHIATRIC REHABILITATION (PRS)

Social Science Division, Room A244,
(847) 543-2047

PRS 111 Survey of Psychiatric Rehabilitation (3-0) 3 Hours
The course provides an overview of psychiatric disability and rehabilitation approaches to psychiatric treatment. Topics include: the State of Illinois mental health system and related services; case management, dual diagnosis of substance abuse/psychiatric disabilities; public policy issues and family/community support systems.
Prerequisite: Language Proficiency

PRS 112 Psychiatric Rehabilitation Skills (3-0) 3 Hours
This course focuses on skills needed for serving individuals with severe mental illness. Components included are: interviewing and listening skills; step process for teaching skills; behavior modification principles; aggression management; client assessment and treatment planning; and crisis intervention techniques.
Prerequisite: PRS 111

PSYCHOLOGY (PSY)

Social Science Division, Room A244,
(847) 543-2047

PSY 121 Introduction to Psychology (3-0) 3 Hours
The survey course presents the basic concepts and perspectives for understanding human behavior and mental processes. It includes factors affecting human behavior and mental processes, research methodology, the terminology of the discipline, application of psychological principles to everyday life, and the interrelation of psychology with other disciplines.
Prerequisite: Language Proficiency
IAI: S6 900

PSY 122 Psychology in Business and Industry (3-0) 3 Hours
This course is designed as an introductory survey of the field of industrial and organizational psychology (in business). The focus is on human behavior and its practical applications in the world of industrial and non-industrial organizations. (e.g. education, government, etc.) Psychological principles in the area of personnel selection, motivation, leadership, job satisfaction, supervisory practices, research, and group activities will be covered.
Prerequisite: Language Proficiency

PSY 129 Psychology of Women (3-0) 3 Hours
The psychological study of women will provide an opportunity to examine critically many of the historical and current views of femininity. It will draw empirical and theoretical contributions from all areas of psychology to provide a firmly based and comprehensive understanding of the nature and potential of women.
Prerequisite: PSY 121 (C or better)

PSY 221 Educational Psychology (3-0) 3 Hours
This course reviews human behavior and the conditions, both physical and social, by which it is modified. Special attention is given to formal education, situations, and problems. Psychological principles in the areas of teacher and student characteristics and needs, social-emotional-sexual-intellectual development, learning, motivation, and special education areas such as learning disabilities and the culturally different student receive special emphasis.
Prerequisite: PSY 121 (C or better)

PSY 222 Child Growth and Development (3-0) 3 Hours
This course reviews the physical, social, emotional, and cognitive development of the child from conception through adolescence. Methods of studying children both individually and collectively are discussed.
Prerequisite: PSY 121 (C or better)
IAI: S6 903

PSY 223 Abnormal Psychology (3-0) 3 Hours
This course provides a systematic presentation of the concepts related to psychopathology and personality disorders with specific emphasis given to functional causation and general psychological theory. Behavior deviation patterns are described and illustrated.
Prerequisite: PSY 121 (C or better)

PSY 224 Theories of Personality (3-0) 3 Hours
This course is designed to present the student with a survey of the major theories of personality. Theorists will be studied according to the following categories: 1) psychoanalytic; 2) social-biological; 3) psycho-statistical; 4) stimulus-response; 5) existential. Several case studies will be presented for analysis.
Prerequisite: PSY 121 (C or better)

PSY 225 Social Psychology (3-0) 3 Hours
The course is an introduction to the study of how individuals interact with their social environment. It includes problems of social learning, attitude formation, persuasion, conformity, communication, group behavior, aggression, altruism, prejudice, and attraction.
Prerequisite: PSY 121 (C or better)
IAI: S8 900

PSY 226 Adolescent Development (3-0) 3 Hours
The course integrates theory and research as they relate to biological, cognitive, and social-emotional development of adolescents in cultural context. Students will gain an understanding of family relationships; friend and peer relations; school, college, and career experiences; self-identity; gender; and sexuality, as well as the research methods psychologists use to study development.
Prerequisite: PSY 121 (C or better)

REFRIGERATION AND AIR CONDITIONING (RAC)

Engineering, Math, Physical Sciences Division,
Room B162, (847) 543-2044

RAC 110 Theory of Refrigeration (3-3) 4 Hours
This course consists of lectures, demonstrations and lab experiences in the area of basic refrigeration, theory, and practice. The functioning and operating characteristics of the mechanical refrigeration system including, condensers, evaporators, compressors, refrigerant control devices, refrigerants, test equipment and special service procedures connected with the basic refrigeration cycle will be covered.
NOTE: The student will be required to purchase basic hand tools that will be used in this and other refrigeration and air conditioning courses.
Course fee

RAC 111 Domestic Refrigeration Systems (3-3) 4 Hours
Service needs of the domestic refrigeration industry including servicing of domestic refrigerators, freezers, icemakers, etc. covered. Various types of electric controls including thermostats, defrost controls, relays, and protective devices are studied. System malfunction diagnosis and corrective procedures are presented and practice.
NOTE: The student will be required to provide their own basic tools.
Prerequisite: RAC 110 and RAC 174
Course fee

RAC 112 Residential Air Conditioning Systems (3-3) 4 Hours
The course will cover the basic principles, practices and operation of air conditioning equipment used for residential cooling. Laboratory work includes operating, testing and troubleshooting various types of air conditioning equipment and a basic understanding of load calculations.
Prerequisite: RAC 110 and RAC 174
Course fee
Offered spring only.

RAC 113 Commercial Refrigeration Systems (3-3) 4 Hours
Various types of installations are studied along with the product to be cooled, the desired temperature to be maintained, and humidity conditions. Problems involving system balance and component capacity and use of heat lead charts are presented.
NOTE: The student will be required to provide their own basic tools.
Prerequisite: RAC 110 and RAC 174
Course fee

RAC 114 Commercial Air Conditioning Systems (3-3) 4 Hours
Special attention is given to the cooling and heating requirements for various commercial structures and the selection of equipment to meet these needs. Calculations and problems coordinated with laboratory operations, heat gain, heat loss calculation, humidification and dehumidfication are included.
NOTE: The student will be required to provide their own basic tools.
Prerequisite: RAC 110 and MTH 115

RAC 115 Installation and Service Practice for Heating and Air Conditioning (2-4) 4 Hours
Provides experiences in the installation and service of residential and commercial heating and air conditioning equipment including selection, layout, troubleshooting and code requirements.
NOTE: The students will be required to provide their own basic tools.
Prerequisite: RAC 112 and RAC 118 and RAC 119
Course fee

RAC 117 Refrigeration Installation and Service Problems (2-4) 4 Hours
Installation procedures and service techniques used in commercial refrigeration and air conditioning, including piping techniques, codes, preventive maintenance, multiple systems, and system accessories.
NOTE: The students will be required to provide their own basic tools.
Prerequisite: RAC 110 and RAC 113 and RAC 119
Course fee

RAC 118 Residential Heating Systems (3-3) 4 Hours
Oil burners, high pressure and vaporizing; electric heat, various types including panels, baseboards, valance and electric furnaces; heat pumps, gas heat, installation and servicing.
NOTE: The students will be required to provide their own basic tools.
Prerequisite: RAC 110 and RAC 174
Course fee

RAC 119 Electric Motors and Controls (3-3) 4 Hours
Provides background in the theory of operations, application and installation and troubleshooting of electrical control circuits and control devices used in refrigeration, heating, and air conditioning. Covers the basic types of motors used in the industry, their operation and application.
NOTE: The student will be required to provide their own basic tools.
Prerequisite: RAC 110 and RAC 174
Course fee

RAC 171 Refrigeration and Air Conditioning Code (3-0) 3 Hours
Offer students an opportunity to understand and learn the requirements placed on contractors and installation personnel involved in layout and installation of major refrigeration, heating and air conditioning equipment and will attempt to cover national, state, and local codes which govern such installations.
Prerequisite: RAC 110

RAC 172 Special Problems in Refrigeration and Air Conditioning (Variable) 1-3 Hours
Individual research and projects in the area of a student's interest, involving significant effort in problem analysis, data collection, and the development of appropriate solutions. Also, offered to groups if significant interest exists in specific areas such as solar energy, energy conservation, etc
NOTE: Hours or credit would be arranged with instructor.
Prerequisite: RAC 110 and RAC 174 and RAC 119

RAC 173 Air Movement and Ventilation (3-2) 4 Hours
Proper methods and techniques involved in the design, sizing, and balancing of complete ventilation systems covered. Also covers special instruments used to measure air properties and air movement.
NOTE: The students will be required to provide their own basic tools.
Prerequisite: RAC 110 and RAC 112
Course fee

RAC 174 Applied Electricity (3-3) 4 Hours
Basic AC and DC circuitry, laws of electricity, uses of meters, and safety procedures are included in the course. Emphasis is placed on application of electrical wiring to heating, refrigeration, and air conditioning. Practical techniques in wiring and parts of National Electrical Code are studied.
NOTE: The students will be required to provide their own basic tools.
Course fee

RAC 175 Pneumatic Control Systems (3-3) 4 Hours
Provides a background in the theory of operation, application and installation of pneumatic control circuits and control devices used in heating and air conditioning. Also covers electric devices used in conjunction with pneumatic controls.
NOTE: The student will be required to provide their own basic tools.
Prerequisite: RAC 110 and RAC 174 and RAC 119 and RAC 114
Course fee

RAC 176 Certification Preparation (1-2) 2 Hours
This class focuses on material pertinent for students to pass the EPA mandated Section 608 Refrigeration Certification exam including all three certification types. Included in the course are both hands on and written material on: ozone depletion, Clean Air Act, Montreal Protocol, CFC refrigerant replacements, recovery cylinders, shipping and transportation of refrigerants and system operational pressures. Hands on experiences include: leak detection of HFC's substitute refrigerant replacement and recharging techniques, refrigerant recovery and reclaiming, and basic system troubleshooting.
Corequisite: RAC 110
Course fee

RAC 177 Hydronic Heating Systems (3-3) 4 Hours
To provide experiences in the operation, layout, selection and troubleshooting of residential and light commercial boilers. Includes hot water and steam systems.
Prerequisites: RAC 118 and RAC 174

ROBOTICS (ROB)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

ROB 111 Introduction to Robotics (2-2) 3 Hours
An overview of the definitions, classifications, components, sensors, control systems, interface hardware, and socio-economic implications related to the implementation of industrial robots. The course is intended to be an introductory course providing information to be used in sequential courses in the areas of maintenance, application, and programming of industrial robots.
Prerequisite: Language and Math Proficiency
Course fee

ROB 112 Automated Systems Control (2-2) 3 Hours
This course is designed to give students technical knowledge related to the operation of devices used to monitor and control automated systems. Mechanical, electrical and electronic components will be studied in detail in terms of theory of operation and application. The use of microprocessors as primary control component is the major topic of the second half of the course.
Prerequisite: ROB 111
Course fee

RUSSIAN (RUS)

Communication Arts, Humanities & Fine Arts Division, Room B237, (847) 543-2040

RUS 121 Beginning Russian I (4-0) 4 Hours
This course will develop basic skills in pronunciation, vocabulary, grammar, reading, listening comprehension, and oral and written communication within the context of the Russian culture.
Prerequisite: Language Proficiency

RUS 122 Beginning Russian II (4-0) 4 Hours
This course continues to develop the basic skills introduced in RUS 121: pronunciation, vocabulary, grammar, reading, listening comprehension, and oral and written communication within the context of Russian culture.
Prerequisite: RUS 121

RUS 221 Intermediate Russian I (4-0) 4 Hours
This course continues to develop the basic skills introduced in RUS 121 and 122. The course is a general review and expansion of beginning grammar, conversation, vocabulary development, readings and writing exercises which focus on life in the former U.S.S.R.
Prerequisite: RUS 122

RUS 222 Intermediate Russian II (4-0) 4 Hours
This course is a continuation of RUS 221 and is designed to increase knowledge of Russian grammar and culture through practice in reading, writing, and speaking the language.
Prerequisite: RUS 221
IAI: H1 900

SOCIAL SCIENCE (SSC)

Social Science Division, A244, (847) 543-2047

SSC 111 Contemporary American Problems I (3-0) 3 Hours
This course is an interdisciplinary course of study examining problems facing contemporary American society of a political, social, and economic nature. The selection of topics is partially predetermined by the texts used in each course. However, an instructor may choose to add or substitute topics. The nature of the flexible and periodic review of topics for discussion reflects changing social concerns.
Prerequisite: Language Proficiency

SSC 112 Contemporary American Problems II (3-0) 3 Hours
This course is presently utilized as an independent study course for students wishing to pursue specific topics to a greater degree than are allowed under present social science division offerings.
NOTE: The consent of the division chairman and the instructor who will direct the student's research are necessary to enroll in this class.
Prerequisite: Language Proficiency

SOCIAL STUDIES TOPICS (SST)

Social Science Division, A244, (847) 543-2047

SST 299 Special Topics in Social Sciences (3-0) 3 Hours
This course addresses the in-depth study of special topics in the social or behavioral sciences (anthropology, education, economics, history, political science, psychology, and sociology). Course content will vary on the topic being studied.
Prerequisite: Language Proficiency
May be taken twice for credit toward degree

SOCIOLOGY (SOC)

Social Science Division, Room A244, (847) 543-2047

SOC 121 Introduction to Sociology (3-0) 3 Hours
This course is an introductory analysis and description of structure and dynamics of human behavior in our society. Students will apply the scientific method to the observation and conceptualization of social roles, status, and culture. Processes in socialization, intergroup and collective behavior, and specific analysis of major institutions and social changes are considered.
Prerequisite: Language Proficiency
IAI: S7 900

SOC 222 Social Problems (3-0) 3 Hours
This course provides an analysis of contemporary social problems and investigates the theories that examine social disorganization. Among areas developed are problems of race and ethnic relations, issues of health care, poverty, sexual and economic inequality, crime and penal institutions, aging, and environmental crises.
NOTE: SOC 121 is recommended but not required to enroll in this course.
Prerequisite: Language Proficiency
IAI: S7 901

SOC 223 Deviance (3-0) 3 Hours
This course examines the sociological study of the origins, causes, and control of deviance and deviant behavior. It also considers deviance as a labeling process. Course emphasis is placed on individual and group deviance, resulting from societal norms and values. Some areas to be covered are, drug use, sexual deviance, criminal behavior, marginal deviance, and career deviance.
NOTE: SOC 121 is recommended but not required to enroll in this course.
Prerequisite: Language Proficiency

SOC 224 Sociology of the Family (3-0) 3 Hours
This course is a study of the interaction between social systems and the family as a system. It includes an analysis of the dynamics of the individual nuclear family with implications for multiple parenting roles.
NOTE: SOC 121 is recommended but not required to enroll in this course.
Prerequisite: Language Proficiency
IAI: S7 902

SOC 225 Social Stratification (3-0) 3 Hours
This course provides an examination of the causes and consequences of social inequality. Of particular focus is how class, race, and gender determine the distribution of and access to power, prestige, and wealth. Classical, contemporary, and comparative analysis of inequality are considered.
NOTE: SOC 121 is recommended but not required to enroll in this course.
Prerequisite: Language Proficiency

SPANISH (SPA)

Communication Arts, Humanities &
Fine Arts Division, Room B237, (847) 543-2040

SPA 121 Beginning Conversational Spanish (4-0) 4 Hours
Fundamentals of language necessary for understanding, speaking, reading and writing of Spanish. Practice in pronunciation from dialogues and pattern practices. This is the college level course.
Prerequisite: Language Proficiency

SPA 122 Beginning Conversational Spanish II (4-0) 4 Hours
Continuation of SPA 121. Emphasis on the development of oral comprehension and conversational ability. Instruction in the appreciation of the Spanish culture to be an integral part of the regular class activities.
Prerequisite: SPA 121

SPA 123 Spanish for Spanish Speakers (3-0) 3 Hours
This course will emphasize grammatical concepts and terminology as well as conversation for the near native and native speakers; it will allow the student to recognize grammatical forms and structures, and to understand their use to communicate meaning. The goal of the course is to enhance the student's knowledge of his/her native language. This course is designed for those students who speak Spanish at home but have not had any or little formal education in the Spanish language. The course will be taught completely in Spanish and will replace Spa 121 or Spa 122 for native and near native Spanish speakers. Attention also will be given to conventions of orthography.
Prerequisite: Native or near-native Spanish speaking ability

SPA 221 Intermediate Spanish I (4-0) 4 Hours
Continued development of oral comprehension and accurate control of sound system and syntax. Selected examples of cultural and contemporary writing to elicit an awareness of the similarities and differences of each culture (English-Spanish) and a fuller understanding of the value systems of the Hispanic societies.
Prerequisite: SPA 122

SPA 222 Intermediate Spanish II (4-0) 4 Hours
A continuation of Spanish 221. Students encouraged to work in language laboratory one hour per week.
Prerequisite: SPA 221
IAI: H1 900

SPA 223 Spanish Civilization I (3-0) 3 Hours
Designed to give the advanced student of Spanish the opportunity to increase his proficiency in the Spanish language. A careful selection of readings of cultural and historical values will provide the writing and conversational material needed to meet the objectives of the course. Filmstrips of high cultural significance will serve to bring into focus various aspects of the Hispanic world and instigate spontaneous oral commentaries.
Prerequisite: SPA 222
IAI: H1 900

SPA 224 Spanish Civilization II (3-0) 3 Hours
A survey of Hispanic literature requiring competence in both conversation and composition. A continuation of SPA 223.
Prerequisite: SPA 223
IAI: H1 900

SPEECH (SPE)

Communication Arts, Humanities &
Fine Arts Division, Room B237, (847) 543-2040

SPE 101 English Pronunciation: Vowels (3-0) 3 Hours
For students wishing to work intensively on learning to pronounce the vowel sounds of general American English. Emphasis is on reducing pronunciation errors that contribute to a distracting accent or dialect.
NOTE: This course does not apply to any associate degree or career certificate.
May be taken four times for credit

SPE 102 English Pronunciation: Consonants (3-0) 3 Hours
For students wishing to work intensively on learning to pronounce the consonant sounds of general American English. Emphasis is on reducing pronunciation errors that contribute to a distracting accent or dialect.
NOTE: This course does not apply to any associate degree or career certificate.
May be taken four times for credit

SPE 111 Communications II (3-0) 3 Hours
For students in career programs or individuals interested in improving communication skills. Designed to acquaint students with a variety of interpersonal communication concepts and theories which will assist students in communicating more effectively in human relations situations. The focus is on one-on-one, dyadic communication, but intrapersonal communication, or awareness of self in the communication process, is also addressed. Topics that will be covered include the communication process and factors influencing it, awareness of self in this process, how culture influences this process, improving the sending and receiving of verbal and nonverbal messages, analysis of relational maintenance, and productive and unproductive conflict strategies.

SPE 121 Fundamentals of Speech (3-0) 3 Hours
For students interested in improving their oral communication competency. This course combines a theoretical basis with practical verbal and nonverbal skills to enhance public speaking effectiveness. Students learn how to develop, research, organize, adapt, deliver and critique messages.
Prerequisite: Language Proficiency
IAI: C2 900

SPE 122 Business and Professional Speaking (3-0) 3 Hours
For students desiring additional and concentrated experience in public speaking. A workshop oriented course covering informative, demonstrative, persuasive and argumentative speaking. Basic goal is for student to think and speak comfortably and effectively before an audience.
Prerequisite: Language Proficiency

SPE 123 Dynamics of Small Group Discussion (3-0) 3 Hours
The study of small groups with an emphasis on decision making and problem solving. A behavioral approach to group communication that includes leadership, interpersonal relationships, communication barriers, conflict resolution, etc. Although of general interest, course should be of special interest to students in business, teaching or psychology programs.
Prerequisite: Language Proficiency

SPE 124 Oral Interpretation (3-0) 3 Hours
Understanding and appreciation of literature through performing it orally in class, both individually and in groups. For students who desire more familiarity with literature and/or students interested in developing their speaking voice.
Prerequisite: Language Proficiency

SPE 127 Intercultural Communication (3-0) 3 Hours
This course will examine how culture influences the communication process. Students will explore how diverse underlying cultural orientations and patterns influence communication behaviors within and between cultures. Theoretical and practical aspects of intercultural communication will be addressed with a focus on how students can become interculturally competent communicators.
Prerequisite: Language Proficiency

SPE 128 Interviewing Practices (3-0) 3 Hours
Techniques and skills to improve fluency, accuracy, and persuasiveness in one-to-one communication. Covers all types of interviewing and process of dyadic communication.
Prerequisite: Language Proficiency

SPE 220 Creative Dramatics for the Classroom Teacher (3-0) 3 Hours
This course introduces the skills and techniques of the creative dramatics process to classroom teachers at the preschool, grade school, junior high and high school levels for use in all curriculum areas. The format includes explanation, demonstration and discussion of the games, improvisational experiences, role play, storytelling, puppetry, and other educational exercises used in the classroom setting. Major emphasis is placed on incorporating creative drama as a process to facilitate learning.
NOTE: Recommended EDU 221.
Prerequisite: SPE 121
Offered summer only.

THEATRE (THE)

Communication Arts, Humanities &
Fine Arts Division, Room B237, (847) 543-2040

THE 121 Introduction to Theatre I (3-0) 3 Hours
Presents a broad overview of live theatre. Will cover the various elements that make up theatre, the history of theatre, the theatre of the present, and the practitioners involved in the production of live theatre. Work on college productions is required.
Prerequisite: Language Proficiency
IAI: F1 907

THE 125 Principles of Acting (3-0) 3 Hours
Introduction to stage movement, concentration, relaxation, improvisation, business and the creation of a character. Emphasis is on recognition and utilization of an actor's "inner resources" in establishing believability on stage in accordance with the intention of a script.
Prerequisite: Language Proficiency

THE 126 Stagecraft (3-0) 3 Hours
Provides training in methods of scene construction, painting, rigging and shifting, with elementary work in lighting practice and control. Practical methods will be taught as well as a survey of historical staging styles to give students an understanding of the evolution of theatre. Theatre practicum and work on college productions required.
Prerequisite: Language Proficiency

THE 127 Theatre Practicum II (0-2) 1 Hour
Supervised work on a production, either via a smaller acting role or backstage technical work like Props Master, running crew, etc.
Prerequisite: THE 125 or THE 126
May be taken three times for credit toward degree
Offered fall and spring only.

THE 129 Theatre Practicum (0-6) 3 Hours
Designed to give students an in-depth experience of the technical work involved in a theatre production. Students will learn how the elements of theatre proceed from the planning stage through the performance nights. Students will be expected to work on actual crews of a production.
Prerequisite: THE 125 or THE 126
May be taken four times for credit toward degree

THE 223 Play Analysis for Production (3-0) 3 Hours
An introductory exploration of the relationships between the dramatic text and the play in performance with special emphasis on basic terminology and methodology. Representative plays will be studied in their genre, historical and social contexts.
Prerequisite: Language Proficiency
Offered fall only.

THE 225 Acting II (3-0) 3 Hours
A continuation of the study of acting, this course will concentrate on characterization, scene study and ensemble work. An introduction to acting styles and period drama will be included.
Prerequisite: THE 125

THE 226 Lighting for Stage and Studio (3-0) 3 Hours
This course will instruct the student in basic electricity, technology, and design of lighting for the stage; elements of studio lighting techniques will also be taught. Specifications and the use of instrumentation will be learned with a hands on approach. Special emphasis will be given to learning the operation of computer controlled lighting boards, as well as more basic manual lighting controllers. Lighting design theory will be explored and each student will complete two project designs.
Prerequisite: THE 126

THE 228 Directing I (3-0) 3 Hours
An introduction to the principles, problems, procedures of directing for the stage. Will include historical background, script selection, interpretation, stage composition, blocking, rehearsal techniques and performance, and a workshop in which students will have the opportunity for practical application of the principles of directing.
Prerequisite: THE 125

THE 229 Stage Makeup (3-0) 3 Hours
An investigation of the principles, techniques and materials of stage makeup and practical experience in their application.
Course fee

VOCATIONAL SKILLS TRAINING (VST)

Community Education and Economic Development Division, Building 4, (847) 543-2034

VST courses do not apply to any associate degree or career certificate.

VST 200 Circuit Board Soldering (2.5-0) 2.5 Hours
Various techniques in the area of through-the-hole and surface-mount soldering will be covered through lecture, demonstration, and practice. Procedures for safety, component identification, tools, and theory will be emphasized.
Course fee

VST 499 Introduction to Telecommunications (2.5-0) 2.5 Hours
Introduction to Telecommunications is a forty-hour course that provides a realistic familiarization with the "Physical Layer" systems of the telecommunications industry. The systems covered in this course include Copper-Based Data, Voice/Video Cabling systems, and Fiber Optic cabling systems that are used throughout the telecommunications industry. This program provides students with the introductory concepts and some of the hands-on training required, of entry level positions, in the telecommunications industry.

VST 500 Network Cabling - The Physical Layer (2-0) 2 Hours
This is a short, intense hands-on training curriculum to develop an understanding of network wiring and cabling. Students completing the program will develop critical thinking skills as well as the skills needed to terminate, test and troubleshoot data, voice and video network wiring.

VST 501 Fiber Optics - The Physical Layer (1-0) 1 Hour
This course will cover developing familiarity with the Fiber Optic Termination Kit, Fiber Optic Concepts, Fiber Optic System Components, Placing Fiber Optic Cables, Testing Fiber Connectors and Installing Fiber Connectors.

VST 711 Office Communications (1.5-0) 1.5 Hours
Students will learn appropriate methods for maintaining an office. These skills will be applied to a variety of situational activities which include scheduling appointments, arranging meetings and conferences, using the telephone, handling the mail, and interacting with office personnel and clients.

VST 712 Developing Office Skills (1.5-0) 1.5 Hours
Students will learn and develop the skills needed to participate in the overall activities of an office. These activities include processing office mail, filing, preparing financial records, using word processing terms and equipment, and becoming familiar with copiers and duplicating machines.

VST 717 Model Office-Level I (.5-0) 0.5 Hour
The Model Office is a simulated work environment providing student "employees" with hands-on training necessary for transition into unsubsidized employment. Technical skills, basic skills and on-the-job survival skills will be covered in this course in accordance with the SCANS recommendations. Students in Level I will attend class two times per week for a total of eight contact hours. They will be responsible for proficiency in 27 skills in seven categories. An additional 16 hours of outside study will be met through open lab times in the Model Office classroom, access to CLC computer labs at both Lakeshore and Grayslake locations, plus worksheets and homework.

VST 718 Model Office-Level II (1-0) 1 Hour
The Model Office is a simulated work environment providing student "employees" with hands-on training necessary for transition into unsubsidized employment. Technical skills, basic skills and on-the-job survival skills will be covered in this course in accordance with the SCANS recommendations. Students in Level II will attend class three times per week, for a total of 16 contact hours. They will be responsible for proficiency in 46 skills in 10 categories.
Course fee

VST 719 Model Office-Level III (1.5-0) 1.5 Hours
The Model Office is a simulated work environment providing student "employees" with hands-on training necessary for transition into unsubsidized employment. Technical skills, basic skills and on-the-job survival skills will be covered in this course in accordance with the SCANS recommendations. Students in Level III will attend class five times per week for a total of 24 contact hours and be responsible for proficiency in 54 skills in 10 categories.

VST 721 Computer Typing I (1-2) 2 Hours
Students will enhance their typing skills by learning how to type on the computer with speed and accuracy.

VST 722 Word Processing (1-2) 2 Hours
Students will learn basic word processing skills.

VST 723 Data Base (2-2) 3 Hours
Students will learn the basics of simple electronic filing on an IBM computer.

WATER-WASTEWATER (WWW)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

WWW 111 Maintenance of Mechanical and Electrical Equipment (3-0) 3 Hours
Overview of equipment maintenance and repair, including preventive maintenance programs, record keeping, lubrication, troubleshooting, etc. Emphasis is placed on equipment encountered in water and wastewater operations.

WWW 112 Fundamentals of Wastewater Treatment (3-0) 3 Hours
Wastewater-Includes basic theory and design for primary and secondary treatment facilities, review of water pollution regulations, sludge handling, disinfection, and review of mathematics for state certification tests.
NOTE: Completion of MTH 115 or higher is strongly recommended.

WWW 113 Basic Waterworks Operations (3-0) 3 Hours
Potable Water-Includes water sources and quality, pumps and hydraulics, chlorination and fluoridation, distribution, certification, and operational reporting. Aids students in preparing for class "D" and "C" certification examination, which includes waterworks facilities that are limited to storage, distribution, and chemical addition to the water supply.
NOTE: Completion of MTH 115 is strongly recommended.

WWW 114 Introduction to Water and Wastewater Analysis (2-2) 3 Hours
An introductory study of laboratory procedures used for the analysis of potable water, wastewater, industrial wastes, and surface and ground waters. Develops an understanding of the theory and laboratory techniques needed for evaluation of treatment methodology, operational practices, and laboratory certification. Special emphasis will be placed on the use of standard methods of analysis for compliance monitoring requirements.
NOTE: Completion of MTH 115 or higher is strongly recommended. The first class meeting will be at the High School Technology Campus. All other class meetings will be held at an off-campus lab.
Course fee

WWW 116 Intermediate Wastewater Plant Operations (3-0) 3 Hours
Wastewater operation and control techniques of primary, secondary, and tertiary wastewater treatment facilities. Primarily for operators preparing for state certification exams.
NOTE: Completion of MTH 115 or higher is strongly recommended.
Prerequisite: WWW 112

WWW 117 Laboratory Analysis: Water Quality (2-2) 3 Hours
Continues the study of laboratory procedures used for the analysis of water and wastewater. Develops an understanding of the theory and laboratory techniques used in advanced laboratory procedures. Special emphasis placed on the use of standard methods of analysis, and quality control practices needed for compliance monitoring requirements and laboratory certifications.
NOTE: First class will be held at the Technology Campus. CHM 120 or equivalent may be substituted for the course prerequisite. All other meetings will be held at an off-campus lab.
Prerequisite: WWW 114
Course fee

WWW 119 Intermediate and Advanced Waterworks Operations (3-0) 3 Hours
Potable Water - Aids the student in preparing for class "A" and "B" state certification examinations. Topics include filtration, aeration, ion exchange, stability control, fluoridation, disinfection, water quality, requirements for laboratory procedures, surface water resources management, coagulation and sedimentation, taste and odor control, water softening by chemical precipitation, and emergency operations.
Prerequisite: WWW 113

WWW 299 Selected Topics in Water Wastewater (Variable) 1-3 Hours
Problems of individual interest in water supply or wastewater treatment technology. Advanced study in one or more technical areas such as treatment processes, design, water quality, process automation, laboratory instrumentation, or water/wastewater mathematics may be approved.
May be taken four times, but any topic only once

WELDING (WLD)

Engineering, Math, Physical Sciences Division, Room B162, (847) 543-2044

WLD 113 Welding Blueprint Reading (3-0) 3 Hours
Study and development of blueprint reading skills as they apply to the metals/welding fabrication trades. Skill and proficiency in understanding the make-up and interpretation of prints will include the study of associated materials, processing, dimensioning, weld joint designs and symbols, as well as fundamental drawing abilities.
NOTE: Student must furnish basic required equipment.

WLD 117 Applied Fabricating and Processing (2-2) 3 Hours
Allows students the opportunity to experience and study supplemental skills required in the metals fabrication trades. Continuation of blueprint reading skills, measurement and layout, inspection and testing, metal finishing, and use of processing and machine tools.
Prerequisite: WLD 170 and WLD 113 and WLD 172 or WLD 175 or WLD 178
Course fee

WLD 170 General Welding (1-2) 2 Hours
Provides a general and basic knowledge of safety, operation, and the fundamentals of gas, shielded metal arc, gas tungsten and gas metal arc welding. Develops primary and essential skills in their safe and proper operation. Equipment set up, applications, tools, materials will be covered. Development of welding skills are secondary to the primary understanding of safety, and knowledge of welding processes application and associated equipment.
Course fee

WLD 171 Gas Welding, Cutting, and Brazing (2-2) 3 Hours
Welding theory, safety, care of equipment, skill development and application with the fuel-gas process. Covers fusion welding, brazing, and cutting processes with steel. Opportunity to practice and work with pipe, cast iron, aluminum, and soldering.
Prerequisite: WLD 170
Course fee

WLD 172 Shielded Metal Arc Welding (2-2) 3 Hours
Covers the fundamental theory and practice of "stick" electrode welding in the flat and horizontal positions. Safety, equipment set-up and adjustment, materials preparation, and electrode selection are emphasized. Opportunity to work with a variety of material thicknesses, joint designs, and all common electrode types; as well as access to a large variety of machine types. Welding of steel and its alloys is emphasized, but opportunity is provided for study and practice of welding other metals.
Prerequisite: WLD 170
Course fee

WLD 174 Advanced Shielded Metal Arc Welding (2-2) 3 Hours
Advanced study in "stick" electrode welding theory and practices. Features opportunity to develop out-of-position welding abilities on plate and pipe, study methods of weld testing, certification procedures, and welding of stainless steel, cast iron and aluminum with the SMAW process.
Prerequisite: WLD 170 and WLD 172
Course fee

WLD 175 Gas Metal Arc Welding (2-2) 3 Hours
This course involves the theory and skill development of GMAW (mig or "wire-feed" process) and FCAW (flux core) arc welding. Students will have the opportunity to study the various aspects and application of this process with steel, aluminum and stainless steel under a variety of conditions. Machine set-up, operation, troubleshooting, maintenance and repair are incorporated throughout the course.
Prerequisite: WLD 170
Course fee

WLD 176 Welding Certification (Variable) 1-3 Hours
Designed to allow the student to prepare for and complete certification or qualification testing utilizing chosen process(es). Standard welding codes (ASME, AWS, API) will be used, or those codes specified by a current or potential employer.
NOTE: Student shall be responsible for the costs of any testing or lab reports performed by outside agents. Individuals or groups with special needs or requirements may enroll with the consent of the program coordinator.
Prerequisite: WLD 170 and WLD 171 and any one of the following WLD 174 or WLD 175 or WLD 178
Course fee
May be taken three times for credit toward degree

WLD 178 Gas Tungsten Arc Welding (2-2) 3 Hours
This course involves the theory and skill development of GTAW (Tig or "Heliarc" process) are welding. Students will have the opportunity to study the various aspects of this process with both ferrous and non-ferrous metals under a variety of conditions. Machine set-up, operations, troubleshooting, maintenance and repair are incorporated throughout the course.
Prerequisite: WLD 170
Course fee

CONTINUING EDUCATION COURSES

Below is a current list of Continuing Education Vocational Skills courses offered by the College of Lake County. All of the courses listed below have no basic skills prerequisites. This list will change each semester as courses are added and deleted based upon needs assessment. Complete descriptions and other information regarding these and other courses offered by Continuing Education may be found in the class schedule or obtained from the Office of Continuing Education (847) 543-2022.

VALH 1	Physical Assessment	.5 credit
VALH 3	Radiography Seminar	2 credits
VALH 4	Medical Imaging Pathology	2 credits
VALH 5	Pharmacology for Allied Health	1 credit
VALH 7	EKG Interpretation	1 credit
VALH 8	Rehabilitation Nursing	5 credits
VALH 9	12-Lead ECG Interpretation	1 credits
VALH 15	Current Gerontological Issues/Nursing	2 credits
VALH 17	Gerontological Care	.5 credits
VALH 20	Current Nursing Practice Update	7 credits
VALH 22	Perioperative Nursing	2 credits
VALH 23	Psychiatric Nursing Update	1 credit
VALH 24	Medical Lab Technician Certification Review	1.5 credits
VALH 27	Medical Spanish	1 credit
VCOS 1	Nail Technology Training	21 credits
VCRF 1	Beginning Stained Glass Window	1.5 credits
VCRF 3	Advanced Stained Glass Window Design	1.5 credits
VCRF 10	Beginning Calligraphy	1 credit
VCRF 11	Advanced Calligraphy	1 credit
VPET 10	Introduction to Horse Management	2 credits
VPET 11	Horse Judging and Selection	2 credits
VPET 12	Horse Health and Disease	2 credits
VPET 13	Horse Nutrition	2 credits
VPET 14	Horse Breeding and Genetics	2 credits
VPET 15	Horse Marketing	2 credits
VPTO 1	Introduction to Photography	1.5 credits
VVOC 1	Real Estate Transactions & Math	3 credits
VVOC 2	Current Topics in Real Estate	1 credit
VVOC 5	Introduction to Travel Agency	3 credits
VVOC 6	Advanced Travel Agent Training	3 credits
VVOC 7	Airline Computer Training	1.5 credits
VVOC 10	Private Pilot Ground School	3 credits
VVOC 15	Woodworking and Furniture Making	2 credits
VVOC 16	Advanced Woodworking	3 credits
VVOC 20	Introduction to Fasteners	.5 credit
VVOC 21	Intermediate Fasteners & Design	.5 credit

Facilities

& Extension Locations

On the Grayslake Campus

The College of Lake County opened its doors in September, 1969. The buildings which now make up the North Campus were, at that time, the 226-acre main campus. The main building, which was completed in 1974, is comprised of the A. Harold Anderson Campus Wing and the Paul W. Brandel Campus Wing. The Learning Resource Center was added to it in 1980. The College added a Physical Education Building in 1982 and the Science/Student Services Module in 1987. This growth reflects the College's commitment to excellence as well as the support it has received from the people of Lake County.

The **Learning Resource Center** is the cultural center of the college. Named after the first chairperson of the Communication Arts, Humanities, and Fine Arts Division, the **John C. Murphy Memorial Library** honors one of CLC's earliest teachers and leaders with a collection of over 125,000 books and 600 periodical titles. Its **Audio-Visual Center** provides students with access to 800 filmstrips, 500 films and video tapes, and hundreds of audio-cassettes and records. The **Learning Assistance Center** provides tutoring and alternative delivery systems to support and complement classroom instruction. In the informal library lounge, browsers can relax with the latest copies of popular periodicals, national newspapers, new books, and updated career materials. In the **Community Gallery of Art**, patrons can enjoy art exhibits, poetry readings, and musical recitals. Many of the activities in the gallery are sponsored by the College of Lake County Foundation. The Esper A. Peterson Reading Room provides an open, well-lighted space overlooking Willow Lake for students to study, read, and have quiet conversations.

The **Physical Education Building** houses physical education, intramural, and inter-collegiate athletic activities. At regularly scheduled times when the gym is not being used for other purposes, currently enrolled CLC students may use the field house and the weight room for recreation and exercise. Outside the Physical Education Building, the College's other athletic facilities include athletic fields, tennis courts, and a physical fitness trail which encircles the campus.

Student Activity Areas are designed to meet the needs and interests of students beyond the formal classroom setting. The Recreation Room, located in the lower level in the main building, allows students to enjoy billiards, table tennis, foosball, and electronic games. Others may enjoy refreshments and occasional entertainment in Lancers, also in the lower level. And the College Bookstore is here, too.

An 80,000 square foot **Science/Student Services** addition to the main campus opened in the spring of 1987. This module houses facilities for biology, chemistry, and medical records technology classrooms, as well as laboratories and preparation areas, student service offices, a conference center, and a four hundred-seat auditorium. A counseling center has been added in this module as well as office space for the student newspaper and radio station and the student government offices.

Since the College of Lake County is a community college designed to be a commuter institution, ***housing facilities are not available.***

The **Multi-Use Instructional Building** was opened in the fall of 1996. It includes a child care center and classrooms and faculty offices for the art, nursing education, multimedia, and human services programs.

The **Performing Arts Building** opened during the spring 1997 semester. It includes three theatres: a six hundred-seat Mainstage Theatre (used for musicals and other major productions), a two hundred-fifty seat Studio Theatre (used for most other productions), and a smaller Experimental Theatre (used for student productions and classes). The facility also houses practice areas for dance, choir, and instrumental activities, along with classrooms and faculty offices.

Hours of Operation

These hours are generally maintained during the semester while classes are in session. There may be exceptions during breaks or holidays.

Admission and Financial Aid

Monday-Thursday	8:00 a.m.-8:00 p.m.
Friday	8:00 a.m.-4:00 p.m.

Bookstore and Business Services Offices

Monday-Thursday	8:00 a.m.-8:30 p.m.
Friday	8:00 a.m.-4:30 p.m.

Learning Resource Center

Monday-Thursday	8:00 a.m.-10:00 p.m.
Friday	8:00 a.m.-4:30 p.m.
Saturday	9:00 a.m.-4:30 p.m.
Sunday	1:00 p.m.-5:00 p.m.

Lakeshore Campus

Monday-Thursday	7:30 a.m.-10:00 p.m.
Friday	7:30 a.m.-4:30 p.m.
Saturday	8:00 a.m.-2:00 p.m.

Southlake Educational Center

Monday-Thursday	8:00 a.m.-10:00 p.m.
Friday	8:00 a.m.-4:30 p.m.
Saturday	9:00 a.m.-1:00 p.m.

Food Service

Lancers, a deli-style restaurant, is located in the Commons area of the main building, near the bookstore on the Grayslake campus. The menu includes a variety of sandwiches, soups, salads, desserts, drinks, plus a daily special, all made fresh daily at its CLC facility. Food Service is open Monday through Thursday from 7:00 a.m.-8:30 p.m., Fridays 7:00 a.m.-2:30 p.m. and Saturday from 7 a.m. to 1:00 p.m. when classes are in session.

The Willow Room restaurant is also located on the Grayslake campus. It specializes in great food at great prices. The restaurant operates like a buffet; as long as there are tables open, patrons will be able to walk in, have a complete meal, and be out in half an hour. The Willow Room is open for lunch Monday through Friday from 11:00 a.m.-1:30 p.m.

Lakeshore Campus

The College of Lake County Lakeshore Campus (LSC), located at 111 N. Genesee Street in Waukegan, offers students a variety of educational opportunities including high quality classroom and self-paced video instruction.

The Lakeshore Campus provides educational programming including transfer and career courses leading to the acquisition of A.A. and A.A.S. degrees, adult education, continuing education, community service activities, and career development courses.

The Lakeshore Campus also provides a broad range of support services which include registration, basic skills testing, academic advising, academic support through the Learning Assistance Center, a bookstore, child care, and counseling.

The Lakeshore Campus is open Monday through Thursday 7:30 a.m.-10:00 p.m., Friday 7:30 a.m.-4:30 p.m., and Saturday 8:00 a.m.-2:00 p.m. For more information, call (847) 623-8686.

Parking
There are one hundred-fifty free parking spaces in the City of Waukegan parking garage adjacent to the Lakeshore Campus South Building that may be used by College of Lake County students. CLC students are required to obtain a parking permit from the Campus Safety officer at the reception desk in the South building of the Lakeshore Campus before parking in the structure. The entrance to the garage is on Sheridan Road, and the entrance to the Lakeshore Campus from the garage is at the northwest corner of the garage at the rear of the South building.

Textbooks
The bookstore hours are Monday, Tuesday and Thursday from 10:00 a.m.-12:30 p.m. and 1:30 p.m.-6:30 p.m., Wednesday from 11:00 a.m.-3:00 p.m. and 4:00 p.m.-8:00 p.m., and Friday from 7:45 a.m.-12:30 p.m. and 1:30 p.m.-4:30 p.m. Textbooks are available at the Lakeshore Campus for students enrolled in courses at the Lakeshore Campus and at Wauke-gan West, Zion-Benton, and Warren high schools. Books may be purchased during the first two weeks of classes from 7:45 a.m.-8:30 p.m. Monday through Thursday, and 7:45 a.m.-4:30 p.m. on Friday.

Southlake Educational Center

The Southlake Educational Center (SLC), is located at 1120 South Milwaukee Avenue in Vernon Hills, a quarter mile north of the intersection of Route 21 and Route 45 and two miles south of Route 60. The Vernon Hills facility serves the southeast and southwest portion of Lake County. The Center houses two new computer laboratories, two distance learning rooms, and eight general classrooms, as well as administrative offices.

The Center offers a wide range of courses and services including registration, advising, basic skills testing, and career counseling. Using the latest computer equipment, a variety of credit and non-credit computer courses are available at SLC to improve either workplace or personal computer skills. Senior citizens pursuing life-long learning opportunities can enroll in mini-courses through the Discovery Program, and weeklong in-depth study experiences through the Elder College program. District residents are able to work towards an A.A.S. degree with a business emphasis and an A.A. degree with a liberal arts emphasis by taking courses at SLC, Adlai Stevenson, Highland Park, Deerfield, Lake Zurich, and Wauconda high schools. For more information, call (847) 478-1833.

Textbooks for students enrolled in SLC classes may be purchased between 8:30 a.m. and 8:00 p.m. at Southlake Educational Center during the first two weeks of classes.

Courses leading to a degree or certificate in Computer Information Systems, Health Information Technology and Multimedia Communications are offered at SLC.

Great Lakes Naval Base Extension

The College of Lake County maintains an office at Great Lakes Naval Base to give servicemembers, their families, and members of the surrounding community an opportunity to work towards an associate degree. Evening courses are offered in both the traditional sixteen week semester and the condensed eight week format, allowing students to complete many of the general education requirements. Services offered at the Great Lakes extension include registration (in-person only), advising, and textbook purchase for on-site classes. Books for on-site classes are available the first two weeks of each term only. In addition, all the facilities and services of the main campus are open to extension site students. Non-military students must obtain a base pass prior to start of class. The Great Lakes Extension is located in Building 2, Navy Campus. Office hours are 8:30 a.m.-4:00 p.m. Monday through Thursday, or Friday by appointment only. For more information call (847) 688-2365.

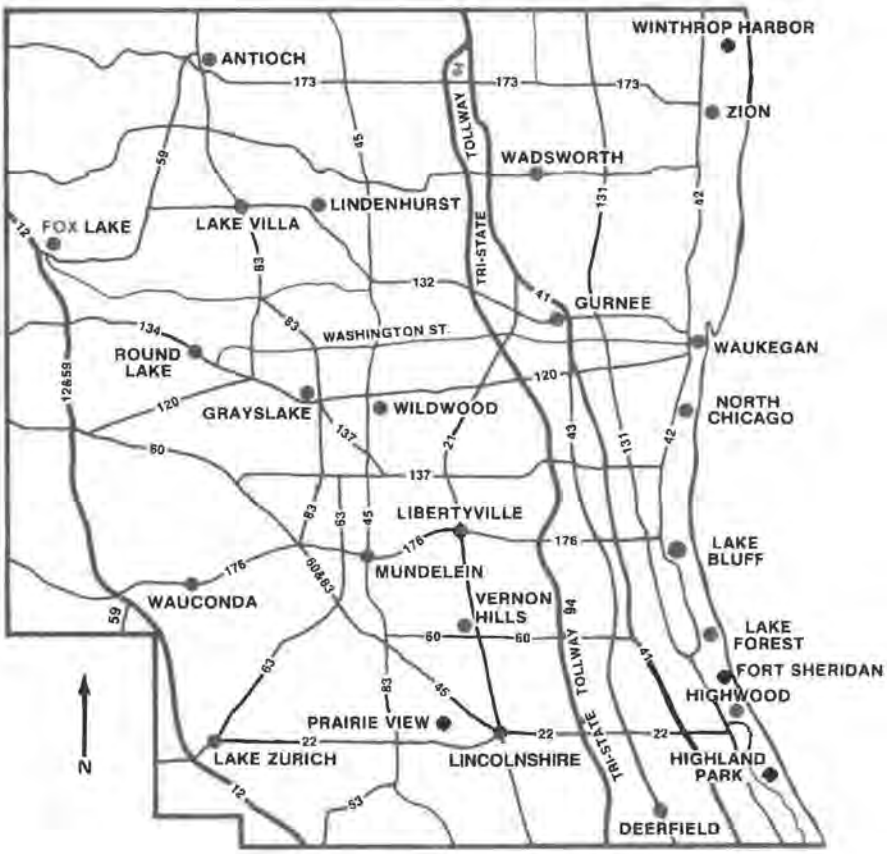
Additional Extension Sites

The college also frequently offers classes at the following locations:

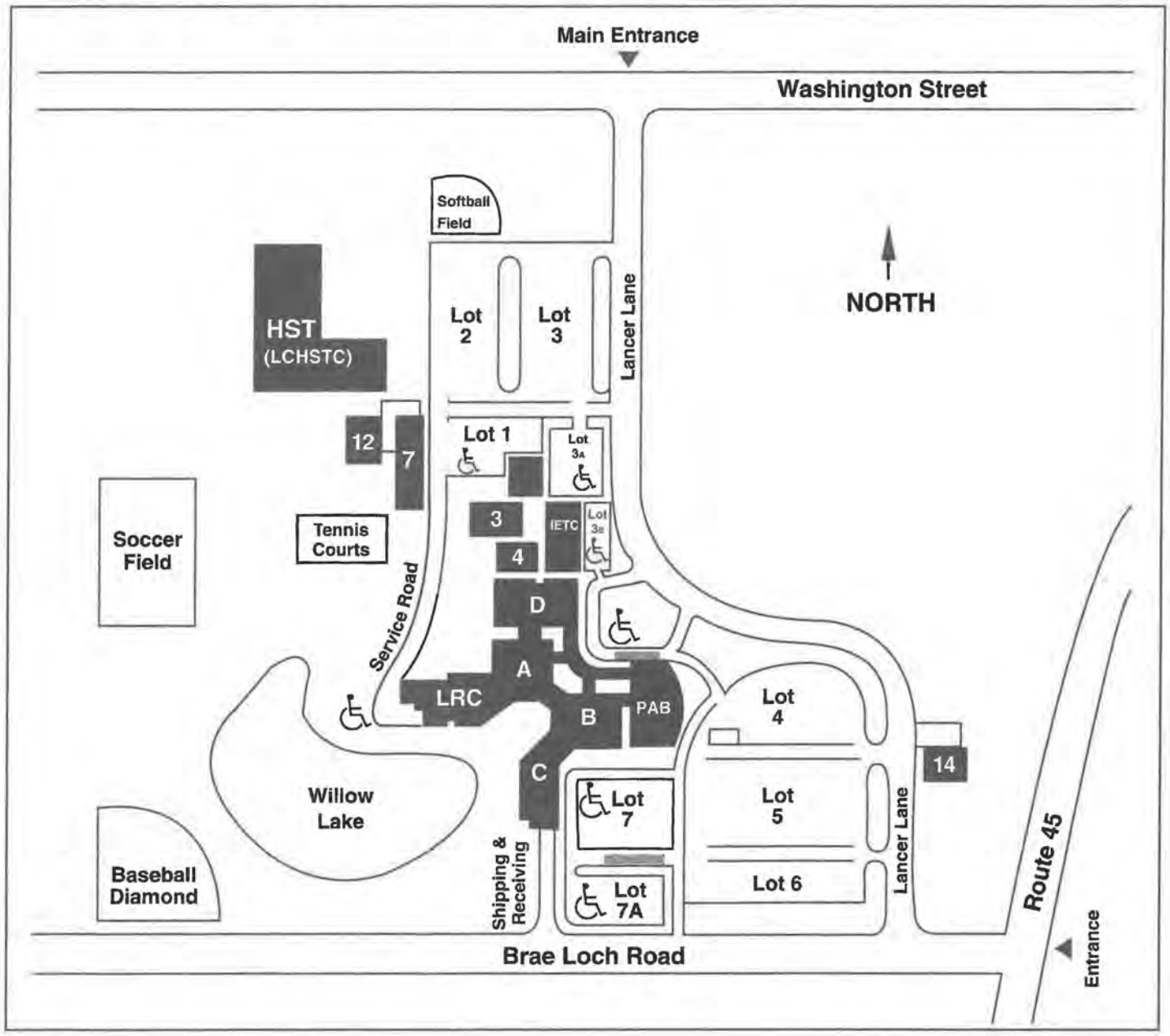
Adlai Stevenson High School	Prairie View
Antioch Community High School	Antioch
Deerfield High School	Deerfield
Grant High School	Fox Lake
Great Lakes Naval Base	Great Lakes
Highland Park High School	Highland Park
Highland Park Senior Center	Highland Park
Lake County High Schools Technology Campus	Grayslake
Lake Forest High School	Lake Forest
Lake Zurich High School	Lake Zurich
Round Lake High School	Round Lake
Wauconda High School	Wauconda
Waukegan High School-West Campus	Waukegan

For a list of the extension sites used for a specific semester, consult the class schedule for that semester.

Map of CLC District



CLC Campus Map



LEGEND

BUILDINGS

A,B, & C - Administrative Offices & classrooms
D - Administrative Offices, classrooms & Child Care Center
PAB - Performing Arts Building Theaters, classrooms and Box office
LRC - Learning Resource Center
3 - General Classrooms
4 - Adult & Continuing Education
7 - Physical Education Center
12 - Automotive Technology
14 - Ornamental Horticulture

HST - Lake County High Schools Technology Campus (Automated Industrial Center)
IETC - Illinois Employment & Training Center

PARKING LOTS

Student & Visitor - Lots 2, 3, 4, 5, & 6
Staff - Lots 1, 7, 7a & 3b
IETC - Lot 3b
Visitor - Circle Drive & Lot 7

ADAMS-SOLLER, NEDRA
Speech
B.S., Eastern Michigan University
M.A., Eastern Michigan University

ADDY, ANDREA
Financial Aid Assistant
B.S., Illinois State University

AGUINALDO, TERESA G.
English
B.A., University of Missouri-Columbia
M.A., University of Missouri-Columbia

ALDERSON, LESLIE
RAC Lab Assistant
RAC Certificate, College of Lake County

ALLEN, ANN McKAIN
Graphic Designer
B.A., Emporia State University

ALPERT, VALERIE
Dance
B.F.A., University of Illinois
M.F.A., Ohio State University

ANASTASIO, DENISE J.
Health Information Technology
B.A., University of Wisconsin-Parkside
R.H.I.A., Seattle University
M.P.A., University of Wisconsin-Parkside

ANDERSEN, CINDY
Child Care Class Facilitator
A.A.S., College of Lake County

ANDERSON, ROGER L.
Computer Information Systems
B.S., Michigan State University
M.S., University of Missouri

ANDRADE, OSCAR
Computer Information Systems
B.S., Northeastern University
M.S., Northeastern University

ARMOUR, RAYNE S.
Librarian
B.A., Mount Mary College
M.A., University of Kentucky

ARNOLD, THOMAS
Criminal Justice
B.A., Western Illinois University
M.A., Western Illinois University
Ed.D., Northern Illinois University

ARROYO, JUAN
Admission & Records Specialist
A.S., College of Lake County
B.A., Southern Illinois University

BADER, JOANNE
EMPS Lab Assistant
B.S., DePaul University

BAKKER, CORNELIA
Dean, Learning Resources Center
B.A., University of Wisconsin
M.A., University of Wisconsin

BARRIENTOS, LAMONT
Financial Aid Coordinator
B.S., University of Nebraska

BEAUDOIN, JAMES
Assistant Director
Information Systems

BECK, DAVID
Counselor
B.A., Ripon College
M.S., Indiana University

BECKER, CAROL
Coordinator, Community Development
B.A., Northeastern Illinois University

BECKWITH, JO
Reference Librarian
B.A., MacMurray College
M.S.L.S., University of Illinois

BENASSI, MARIO A.
Psychology
B.S., University of Wisconsin-Parkside
M.A., DePaul University
Ph.D., DePaul University

BERRYMAN, TERRI
Director, Career &-Placement Services
B.S., Western Kentucky University
M.A., Northeast Missouri State University

BLOCK, YVONNE
Administrative Office Systems
B.S., University of Wisconsin
M.S., University of Wisconsin

BOND, RUTH
Computer Information Systems
A.A.S., Purdue University
B.S., Southern Illinois University
M.A., Webster University
M.B.A., Webster University

BOOY, GRACE
Learning Resource Center Coordinator, Lakeshore Campus
B.S., University of Wisconsin-Oshkosh

BOUDREAU, PATRICIA
Dental Hygiene
B.S., Southern Illinois University
M.S.Ed., Southern Illinois University

BOYKE, DAVID A.
Physics and Astronomy
A.S., College of Lake County
B.S., University of Wisconsin Whitewater
M.S., Northeastern Illinois University

BRANDT, JANE
Coordinator, Adult Education
B.S., University of Illinois
M.A.Ed., Northern Illinois University

BRASILE, CANDACE
Physical Education
B.S., University of Wisconsin-Superior
M.A., Central Michigan University

BRETZLAUF, MARY ANN
English
B.A., Carthage College
M.A., Northwestern University

BRONNER, GWETHALYN
Director, Instructional Performing Arts Building
B.S., Northwestern University
M.A., The School of the Art Institute of Chicago

BROTZMAN, SARAH
Writing Center Specialist
B.A., Marquette University

BROWN, WENDY
Anthropology/Sociology
B.A., Northern Illinois University
M.A., Temple University
M.Sc., Leicester University

BUCHHOLZ, MADGE
Director, College Bookstore
B.A., Lake Forest College

BULAKOWSKI, CAROLE
Assistant Vice President, Educational Affairs
B.A., Marygrove College
M.A., Eastern Michigan University
Ph.D., Loyola University

BUTTERWORTH, MICHAEL
Speech
B.A., Northern Illinois University
M.A., Northern Illinois University

BYRNE, MARY C.
Library Circulation Supervisor
B.S., Illinois State University

CAMPBELL, ALESE
Director, Small Business
Development Center
B.B., Western Illinois University
CPA

CANIGLIA, ROBERT
Equipment Technician
A.A., College of Lake County
B.A., Northeastern Illinois University
M.A., Northeastern Illinois University

CARLSON, DONNA
Mathematics
B.S., University of Illinois
M.S., University of Illinois

CARLSON, LEE
Evening and Weekend Coordinator
B.A., U.C.L.A.
M.Div., Trinity International University

CARTER, MICHELLE
Reference Librarian
MLS, Northern Illinois University
B.A., University of Wisconsin-Parkside

CASPER, NATALIA
Mathematics
B.S., Marquette University
M.S., Marquette University

CHAPIN, AMY
Learning Disabilities Specialist
B.A., Carthage College
M.S., National-Louis University

CHARUHAS, MARY S.
Dean, Adult and Community Education
B.A., Indiana University
M.S.Ed., Northern Illinois University

CHITTAL, PANDURANG (JAY)
Accounting
M.S., Illinois Institute of Technology
M.A.S., Northern Illinois University

COIL, VIRGINIA
Mathematics
B.S., University of Illinois
M.S., University of Illinois

COLEMAN, LUCILLE D.
Associate Degree Nursing
A.D.N., Jones County Junior College
B.S.N., Alverno College
M.S., DePaul University
R.N.C., American Nurses Association
C.N.A., American Nurses Association

COLEMAN, REGINALD
Art
B.F.A., University of Oklahoma
M.F.A., University of Oklahoma

COLTON, CATHY
English
B.A., Northeastern Illinois University
M.A., University of Illinois Chicago
Ph.D., University of Illinois Chicago

CONLEY, CARLOTTA
Child Care Class Facilitator
A.A.S., College of Lake County

COOK III, GRANGER
Microcomputer Support Specialist
A.A.S., College of Lake County
B.S., Roger Williams College

COOKE, CLAUDIA Y.
Student Support Services Coordinator
Carl Perkins Grant
B.A., Chicago State University

CORN, MICHAEL J.
Dean, Biological and Health Sciences
B.S., Eastern Illinois University
M.S., Eastern Illinois University
Ph.D., University of Florida

COSCARELLI, ROBERT J.
Speech, Theatre
B.S., Indiana University
M.S., Indiana University

COSNER, SANDRA L.
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SCHEVERA, NICHOLAS
English
B.A., Colgate University
M.B.A., Pace University
M.A., New York University
Ph.D., New York University

SCHIELE, EVELYN
Director, Public Relations
B.A., Northwestern University
M.A., Northwestern University
M.A., Webster University

SCOTT, KIMBERLY
Child Care Class Facilitator
A.A., College of Lake County

SHACKELFORD, DARLENE
Associate Degree Nursing
B.S.N., University of Illinois
M.S., Northern Illinois University

SHAKIR, GAYLIS INGRAM
Counselor
B.A., Michigan State University
M.A., Wayne State University
National Certified Counselor

SHEADE, MARLA
Math Center Specialist
B.A., Northeastern Illinois University

SHELLEY, C. ELISE
Project Specialist
B.A., University of Wisconsin
B.Ed., Carthage College

SHROKA, JULIA
Director, Alumni Relations and Special Events
B.S., Drake University
M.A., Webster University

SHRYOCK, KIMBERLY
Mathematics
B.S., University of Maryland
B.S., Kansas State University
M.S., Kansas State University

SIMONSEN, KENNETH H.
Philosophy, Humanities
B.A., College of William and Mary
M.A., University of Colorado

SIMPSON, IRMA
Purchasing Agent
A.A., College of Lake County

SLEGERS, JOHN
Telephone & Voice Networks Manager
A.A.S., Clark College
B.G.S., Roosevelt University

SMITH, BEVERLEY
Testing Specialist
B.S., University of the West Indies

SMITH, MARK
Mathematics
B.A., Bradley University
M.S., Purdue University

SMITH, BRIAN K.
Philosophy
B.A., University of Minnesota
M.A., University of Chicago

SOLLER, RICHARD
Speech
B.S., The Ohio State University
M.A., Northern Illinois University

SOSNOWSKI, DON
Workplace Training Coordinator
B.A., Gordon College

SPETS, TERRANCE R.
Director, Student Recruitment
A.A.S., Carl Sandburg College
B.A., Mundelein College

SPRUILL, BRIAN O'KEEFE
Counselor
A.A., Waubonsee Community College
B.A., Northern Illinois University
M.Ed., Northern Illinois University

STABEN, ADENA P.
English as a Second Language
B.A., Grinnell College
M.A., Indiana University

STARSHAK, MAUREEN K.
Political Science
B.A., University of Dayton
M.A., University of Toledo

STARZEC, LARRY
English
B.A., Northern Illinois University
M.F.A., Warren Wilson College

STEFFEN, LYNN F.
Administrative Office Systems
B.S., Kent State University
M.S., Northern Illinois University

STEIGER, SHARON
Chemistry Lab Specialist
B.A., Carthage College

STEINKAMP, SCOTT
Accounting
B.S., Eastern Illinois University
M.B.A., Eastern Illinois University

STIRRAT, NOEL L.
Geography, Anthropology
B.A., University of Missouri -Columbia
M.A., University of Missouri -Columbia

STOMPER, JEFFREY
Division Assistant, Academic Advisor
Social Science Division
B.A., Northern Illinois University
M.Phil., Yale University
Ph.D., Yale University

SWAN, DELORES
Director, Nursing Education
B.S.N., University of Minnesota
M.Ed., University of Minnesota

TAYLOR, TONYA
Student Development Specialist
B.A., Western Illinois University

TENUTO, JOHN C.
Sociology
B.A., DePaul University
M.A., DePaul University

TESCH, REMEDIOS H.
Medical Laboratory Technology
B.S., University of Santo Tomas
Certificate, St. Mary's Hospital School of Medical Technology
M.T. ASCP Certified
M.S.Ed., Northern Illinois University

THALL, REBECCA MUNK
Philosophy, Humanities
B.A., University of Wisconsin-Madison
M.A., University of Illinois-Chicago

THOMAS, JACINTA
English/English as a Second Language
B.A., University of Madras, India
M.A., University of Madras, India
Ph.D., Indiana University of PA

THOMAS, JOHN
Mathematics
B.A., Northwestern University
M.S., Northern Illinois University
Ph.D., University of Illinois-Chicago

THOMPSON, MARCY
Director, Job Readiness Programs
B.S., University of Wisconsin - LaCrosse
M.S. Ed., Northern Illinois University

TIMAN, HELEN
User Support Technician
A.A., College of Lake County

TRZASKA, KEN
Director of Business and Industry Training
B.S., Suny Brockport
M.A., College of Saint Rose

TWARDOCK, ROBERT
Civil Engineering/Building Construction
B.S., University of Illinois
M.S., University of Illinois

URBAN, MARY
Chemistry
B.S., DePaul University
M.S., DePaul University

VALENTINE-FRENCH, SUZANNE
Psychology
B.A., York University
M.S., University of Calgary

VALENTINO, KENNETH
Testing Center Assistant
B.A., Trinity College
M.Ed. National-Louis University

VARGAS, WILLIAM S.
Counselor
A.S., Triton College
B.A., Northeastern Illinois University
M.A., Northeastern Illinois University

VIOLANTE, MARC N.
Director, Procurement Technical Assistance Center
B.S., U.S. Naval Academy

VOGL, THOMAS
Radiography
Certificate, Mercy School of Radiologic Technology
B.S., Creighton University
M.S., Morehead State University

VOLTZ, ROGER H.
Criminal Justice
B.S., University of Wisconsin -Platteville
M.A., Sam Houston State University

WADE, MARY C.
Biology
B.A., Lewis University
M.S., University of Illinois

WARNKE, DALE W.
Economics
B.A., San Francisco State College
M.A., McMaster University

WASHINGTON, L. SHEREA
Job Placement Specialist
B.S., Southern Illinois University
M.A., Northeastern Illinois University

WATTERS, MICHAEL W.
Dean, Engineering, Mathematics & Physical Sciences
B.A., Southwestern College
M.S., Kansas State University
Ed. S., Emporia State University

WEATHERSPOON, DAVID
Director of Student Services
B.A., Western Illinois University
M.A., Western Illinois University

WELCH, PEGGY
Nursing
A.A. Polk Community College
A.S., Polk Community College
M.S., North Park University
B.S.N., Barat College/Finch University

WENER, CLIFFORD
Food Service, Culinary Arts
B.S., University of Illinois
M.B.A., Webster University
M.A., Webster University

WENTZELL, DAVE
Biology Lab Specialist
B.A., Ripon College

WHITE, ELIZABETH
Regional Coordinator, Great Lakes
A.S., College of Lake County
B.A., Chapman University
M.S., National-Louis University

WHITTAKER, SUSAN
Job Readiness Coordinator
A.S., College of Lake County
B.A., University of Wisconsin

WILLIAMS, BERIDA
Sr. User Support Technician
A.A.S., College of Lake County
B.A., Southern Illinois University

WILLIAMS, DIANE
English
B.A., Columbia College
M.A., Columbia College

WILSON, BARRY M.
Horticulturist
A.A.S., College of Lake County

WILSON-GROSS, VERNA
Job Readiness Coordinator
B.S., Southern Illinois University

WININGS, JEFFERY
LAC Instructional Assistant
B.A., Purdue University

WINTER, MARY
English
B.S., Northwestern University
M.A.T., Indiana University

WOLF, PAGE J.
Instructional Developer
B.S., University of Illinois
M.S. Ed., Northern Illinois University

WONG, RICHARD
Mathematics
A.A.S., College of Lake County
B.A., Winona State University
M.S.T., Illinois Institute of Technology

WYDEEN, RUSSELL
LAC Math Center Assistant
B.S., University of Illinois Chicago
M.A., Roosevelt University

WYNN, SUE
Associate Degree Nursing
B.S.N., College of St. Teresa
M.S., Northern Illinois University

XU, MAY
Mathematics
B.S., Beijing Normal University
M.S., Northeastern Illinois University

YOUNG, JOE
Director, Educational Talent Search
B.A., Wartburg College
M.S.W., University of Iowa

YU, LI-HUA
Sociology/American Culture
B.A., Xian Foreign Languages University, China
M.A., Bowling Green State University
Ph.D., Bowling Green State University

ZAMPARDO, MARK
Horticulture
B.S., Eastern Michigan University
M.S., Michigan State University
Ph.D., University of Illinois

ZENNER, MARY L.
Accounting
M.Ac., Western Illinois University
C.P.A.

Adjunct Faculty

Medical Lab Technology

BATTI, FAWZIA, M.D.
Medical Director,
Condell Hospital Laboratory
Medical Advisor, MLT Program

CIOLORITO, LARRY, LCDR
Laboratory Manager
Naval Hospital, Great Lakes

FAHIE, ROLAND, LT
Assistant Lab Manager
Naval Hospital, Great Lakes

HOLLAND, BETH, MT (ASCP)
Clinical Coordinator
Woodstock Memorial Hospital

KREHBIEL, JANICE C., MT (ASCP)
Clinical Coordinator
Mid-western Regional Medical Center
B.S., Trinity College

LYON, NANCY MT (ASCP)
Clinical Coordinator
Ravinia Associates

MILLER, CYNTHIA, MT (ASCP)
Clinical Coordinator Laboratory
Condell Memorial Hospital
B.S., Chicago Medical School

MURPHY, CAROL, MT (ASCP), M.Ed.
Clinical Coordinator
Veterans Administration Medical Center
B.S., Chicago Medical School of Allied Health
M.S., Northwestern University

ROBBINS, SEAN, HM2
Clinical Laboratory Student Coordinator
Naval Hospital, Great Lakes

Medical Imaging

BABBITT, NAOMI, R.T. (R)
Clinical Supervisor
Victory Memorial Hospital
St. Joseph Hospital School of Radiologic Technology
Houston, Texas

DAVIDSON, BRENDA, R.T. (R)
Clinical Supervisor
Northern Illinois Medical Center
B.S., Western Illinois University
B.S.N., St. Anthony College of Nursing

ECK, EDWARD, R.T. (R)
Clinical Supervisor
Great Lakes Naval Hospital
A.A.S., Monroe Community College
Rochester New York

QUICK, THERESE, R.T. (R)
Clinical Supervisor
Provina St. Therese Hospital
A.A.S., College of Lake County

SHERBAHN, LINDA M.D., Radiologist
Medical Advisor
Highland Park Hospital
M.D., University of Hawaii

SWANSON, SCOTT, R.T., (R)
Clinical Supervisor
Condell Medical Center
A.A.S., College of Lake County
B.A., Southern Illinois University

WEBER, PATTY, R.T. (R)
Clinical Supervisor
Good Shepherd Hospital
A.A.S., College of Lake County

WICKLANDER, CORRIE, R.T. (R)
Clinical Supervisor
Highland Park Hospital
A.A.S., College of Lake County

Nursing

TEOFILA, U. RAFAEL, RN
M.S.N., Saint Xavier University
Clinical Nurses Specialist
Provena Saint Therese Medical Center

Phlebotomy Certificate

BRESSERT, CATHERINE M., MLT (ASCP)
Phlebotomy Supervisor
Condell Hospital
A.A.S., College of Mount Saint Joseph

KELLEY, MARIA, MLT (ASCP)
Hospital Services Coordinator
Lake Forest Hospital - CML
A.A.S., College of Lake County

SZYDLOWSKI, GLEN
Laboratory Supervisor
Lake County Department of Health
B.S., M.T., Chicago Medical School

Index

The College of Lake County provides a wide range of learning opportunities to meet the various educational needs of students from diverse educational backgrounds. The college welcomes all individuals who can benefit from its courses and programs of study. An individual will be admitted to the college by completing and submitting the Application for Admission form. The college serves those who are high school graduates, others 18 years of age or older, and individuals younger than 18 years of age who meet established criteria.

Admission to the college, however, does not ensure entrance into all programs of study or courses. Specific programs may have admission criteria which may include, but are not limited to, age, evidence of language and mathematics skills, and level of education. Students taking college-level courses must demonstrate college-level competency in language and mathematics. In addition, students are required to complete specified prerequisites prior to enrollment in certain courses.

The college reserves the right to limit enrollment because of space or budget restrictions, to establish selective admission requirements, and to give preference to residents of Community College District 532.

Prerequisites

Prerequisites are other courses, knowledge, skills, or permission that must be obtained before a student enrolls in a course. Students can meet ***academic proficiency prerequisites*** through demonstration of ***English language proficiency*** and/or ***math proficiency***. In addition, students may need to meet other ***course prerequisites*** that have been established for specific courses.

Academic Proficiency Prerequisites

Language Proficiency

Incoming students will be assessed for language proficiency as demonstrated by meeting any one of (a) through (f) below. If the student meets option (g), course credit will be reviewed.

a. Official transcript of high school record showing top 1/3 rank in class after six semesters.

b. CLC Academic Proficiency Test, Language Skills: Score of 153 or above.

c. American College Test (ACT),
Reading: Score of 17 or above.
English: Score of 17 or above.

d. Scholastic Aptitude Test (SAT),
Verbal Score of 450 or above.

e. Official transcript of General Educational Development (GED) test
Reading Skills: Score of 55 or above
Writing Skills: Score of 55 or above

f. Test of English as a Foreign Language (TOEFL),
Computer-based test: Score of 195 or above
Paper-based test: Score of 525 or above

g. Evidence of an associate or higher degree from an accredited college or university.

h. Official transcript of college/university record listing one of the following:
- at least 30 semester hours of credit with no grade less than C
- or credit equivalent to ENG 108 with a grade of A or B
- or credit equivalent to ENG 109 or higher level courses at CLC

Math Proficiency

Incoming students will be assessed for math proficiency as demonstrated by meeting any one of (a) through (f) below. If the student meets option (g), course credit will be reviewed.

a. Official transcript of high school record showing top 1/3 rank in class after six semesters.

b. CLC Academic Proficiency Test, Math: Score of 56 or above.

c. American College Test (ACT), Math: Score of 17 or above.

d. Scholastic Aptitude Test (SAT), Math: Math Score of 450 or above.

e. Official transcript of General Educational Development (GED) test Mathematics: Score of 55 or above

f. Evidence of an associate or higher degree from an accredited college or university.

g. Official transcript of college/university record listing one of the following:
- at least 30 semester hours of credit with no grade less than C
- or credit equivalent to MTH 101 or higher level courses at CLC

Course Prerequisites

Course prerequisites which have been established for individual courses are based on the student having received knowledge and skills through previous coursework.

Students who have not met a course prerequisite but believe they possess equivalent knowledge or skills through prior coursework or experience should contact the Academic Divisional Office.

An official transcript is one that is sent directly from the sending institution to the Office of Admission and Records. If your name has changed, please ask the sending institution to show your new name on the transcript.

Apply to CLC on the Web!
www.clc.cc.il.us/applic.htm

Students are classified at the time of admission to the college for purposes of tuition assessment and enrollment reporting according to resident status as follows:

In-District Illinois Resident Student:

1. A student who is 18 years of age or older who has lived in Community College District 532 in some capacity other than as a student at a post-secondary education institution or a correctional institution for at least thirty (30) days prior to enrolling at CLC, or
2. An unemancipated student under 18 who has at least one parent, step-parent or court-appointed guardian who meets the above criteria.
3. Community College District 532 is defined to include residents of the following Lake County, Illinois public high school districts:

1. Adlai E. Stevenson
2. Antioch
3. Grant
4. Grayslake
5. Highland Park-Deerfield
6. Lake Forest
7. Lake Zurich
8. Libertyville
9. Mundelein
10. North Chicago
11. Round Lake
12. Warren
13. Wauconda
14. Waukegan
15. Zion-Benton

Out-Of-District Illinois Resident Student:

1. A person who resides in Illinois but is not a resident of Community College District 532 as defined above.
2. Includes residents of the Barrington, Illinois public high school district.

Out-Of-State Student:

1. A person who is not a legal resident of the State of Illinois.
2. Includes International students and other non-immigrant aliens.

Proof Of Illinois Resident Status:

1. Evidence of residency shall be based on occupancy of a dwelling.
2. Residency may be verified by displaying one of the following:
   A. Illinois driver's license or identification card issued by the Illinois Secretary of State's office.
   B. Illinois voter identification card.

Questions regarding any specific aspect of CLC programs should be referred to the office most directly responsible. All written correspondence should be sent to the college at 19351 West. Washington Street, Grayslake, Illinois, 60030-1198. Telephone inquiries should go to the number listed with each office.

Questions on:	Call:	Office Location
Activities	543-2055	C104
Admissions and Records	543-2061	B101a
Adult Education	543-2021	Building 4
Advisement	543-2060	C110
Affirmative Action	543-2060	B146
Athletics and Physical Activities	543-2046	Building 7
Biological and Health Sciences Division	543-2042	C140
Bookstore	543-2086	B1
Business and Industry Services	543-2027	B201
Business Division	543-2041	A144
Career and Placement	543-2059	E101
Career Programs	543-2489	B131
Chargebacks and Joint Educational Agreements	543-2422	C206
Communication Arts, Humanities & Fine Arts Division	543-2040	B237
Continuing Education	543-2022	Building 4
Cooperative Education	543-2058	E101
Counseling	543-2060	C110
Educational Guarantees	543-2060	C110
Engineering, Mathematics & Physical Science Division	543-2044	B162
Extension Services	543-2653	Building 4
Financial Aid	543-2062	B114
Health Center	543-2064	A149
International Students and International Education	543-2733	B105
Learning Assistance Center	543-2072	Learning Resource Center
Learning Resource Center/Murphy Library	543-2070	Learning Resource Center
Nursing Education	543-2043	D208
Public Relations	543-2094	A216
Registration	223-1111	B101
Social Science Division	543-2047	A244
Testing Center	543-2076	Learning Resource Center
Tuition Payment	543-2230	A101
Veteran's Information	543-2063	B114

Off-Campus Centers

Lakeshore Campus	623-8686	111 North Genesee Street, Waukegan,IL 60085
Great Lakes Extension Office	688-2365	Building 2, Room 2, Great Lakes, IL 60088
Southlake Educational Center	478-1833	1120 S. Milwaukee Ave. Vernon Hills, IL 60061

19351 West Washington Street - Grayslake, Illinois 60030-1198 - Main number: (847) 543-2000

Cancellation of Classes

If CLC classes are cancelled because of weather or other factors, the cancellation will be announced on the following radio and television stations:

Announcements of day class cancellations will begin by 6 am. Announcements of evening class (those beginning 5 pm or later) cancellations will begin by 4 pm. An automated message will be placed on the telephone system during hours when the switchboard is closed. ***Remember:*** The switchboard gets very busy if many students call. Please call only if it is impossible to listen to one of these stations.

In any case, use your good judgement!

WGN	720 AM	CBS-TV	Channel 2
WBBM	780 AM	NBC-TV	Channel 5
WLIP	1050 AM	ABC-TV	Channel 7
WKRS	1220 AM	WGN-TV	Channel 9
WIIL	95.1 FM	WFLD-TV	Channel 32
WXLC	102.3 FM	CLTV-TV	Channel 39
WEXT	104.7 FM		
WZSR	105.5 FM		

Application for Admission

MAIL TO: 19351 WEST WASHINGTON STREET • GRAYSLAKE • ILLINOIS • 60030-1198
Fax: (847) 543-3061 • *WEB APPLICATION*: www.clc.cc.il.us/applic.htm
If you need assistance completing this form, please call the Office of Admissions and Records at (847) 543-2061.

PLEASE TYPE OR PRINT LEGIBLY.
FILL IN OR CHECK APPROPRIATE RESPONSES.

1. COMPLETE LEGAL NAME:

_____
(Last) (First) (Middle)

Former or Maiden Name: _____

2. SOCIAL SECURITY NUMBER:

_____ – _____ – _____

3. SEX: ☐ M - Male ☐ F - Female

4. CITIZEN / VISA STATUS (Check one):
- ☐ 1 - U.S. Citizen
- ☐ 2- Immigrant (Permanent Resident)
  - Country of Origin _____
  - Alien Registration Number _____
- ☐ 3 - Non-immigrant (Non-resident alien)
  - Country of Origin _____
  - Visa Category _____

5. DATE OF BIRTH:

_____ / _____ / _____ AGE: _____
Month Day Year

6. ETHNIC/RACIAL DESCRIPTION (Optional):
- ☐ 01 -Asian or Pacific Islander
- ☐ 02 -Hispanic
- ☐ 03 - American Indian or Alaskan Native
- ☐ 04 -Black Non-Hispanic
- ☐ 05 -White Non-Hispanic
- ☐ 06 - Non-resident Alien

7. MILITARY SERVICE RECORD:
- ☐ 02 - Active Duty - Great Lakes
- ☐ 03 - Active Duty: STATION: _____
- ☐ 04 - Veteran
- ☐ 05 - Never Served

8. TELEPHONE:

HOME: (_____) _____ – _____
Area Code Telephone Number

WORK: (_____) _____ – _____
Area Code Telephone Number

E-MAIL: _____

9. HOME ADDRESS - Must be listed to document legal residence for tuition assessment and state reporting purposes:

_____
Number and Street

_____
City or Town

_____
State & zip code County (if Illinois)

10. MAILING ADDRESS - If you have a second address for the purpose of receiving mail you may list it below. You must also list your permanent address above:

_____
P.O. Box or Street

_____
City or Town

_____
State & zip code County (if Illinois)

11. LAST HIGH SCHOOL ATTENDED:

_____ _____ _____
Name City State

12. LAST COLLEGE/UNIVERSITY ATTENDED OR NOW ATTENDING - WRITE "NONE"IF YOU HAVE NEVER ATTENDED A COLLEGE/UNIVERSITY:

_____ _____ _____
Name City State

13. EDUCATIONAL OBJECTIVE AT CLC:
- ☐ 01 - To complete an associate degree
- ☐ 02 - To complete a certificate of one year or more
- ☐ 03 - To complete a certificate of less than one year
- ☐ 04 - To complete one or several courses

14. STUDENT INTENT: The following best describes my primary reason for attending CLC (Check only one):
- ☐ 1 - To prepare for new or first occupational career
- ☐ 2 - To improve present occupational skills
- ☐ 3 - To explore courses to decide on a career
- ☐ 4 - To prepare for transfer to four-year college/university
- ☐ 5 - To remedy basic skill deficiencies
- ☐ 6 - To pursue non-career, personal interests
- ☐ 7 - To prepare for high school diploma equivalency test
- ☐ 8 - Other or unknown

15. HIGH SCHOOL STATUS:
- ☐ 1 - Graduated from High School: YEAR: _____
- ☐ 2 - Attending now and expect to graduate: YEAR: _____
- ☐ 3 - Received GED High School Certificate: YEAR: _____
- ☐ 4 - Did not graduate and no longer attend.

16. HIGHEST EDUCATIONAL LEVEL COMPLETED AFTER HIGH SCHOOL:
- ☐ 01 - Certificate Program
- ☐ 02 - Associate Degree
- ☐ 03 - Bachelor's Degree
- ☐ 04 - Master's Degree
- ☐ 05 - First Professional Degree
- ☐ 06 - Doctoral Degree
- ☐ 07 - None of the above

17. HAS EITHER OF YOUR PARENTS GRADUATED FROM A FOUR-YEAR COLLEGE OR UNIVERSITY?
☐ Y - YES ☐ N - NO

18. APPLYING FOR TERM BEGINNING: _____
YEAR
- ☐ 01 - Spring (January-May)
- ☐ 02 - Summer (June-July)
- ☐ 03 - Fall (August-December)

19. <u>REQUIRED INFORMATION:</u> PROGRAM OF STUDY:
Refer to "Programs of Study" on back of this application to choose the subject you are most likely to study at CLC:

_____ _____
Code Title

20. CERTIFICATION I understand that withholding information requested on this application or giving false information may make me ineligible for admission to the College or subject to dismissal. With this in mind, I certify that the above statements are correct and complete. (Your signature and date are required before CLC can process this application.) The College of Lake County affirms and adheres to a policy of equal opportunity in all aspects of education and employment.

_____
Signature Date

Programs of Study

Please choose the subject that you are most likely to study at CLC. Write the code and name in the space provided in question 19 on the front of this application form.

BIOLOGICAL SCIENCE

CODE	TITLE
BIO	Biology/Botany/Zoology
CHM	Chemical Technology
DHY	Dental Hygiene
DNT	Pre-Dentistry
EMT	Emergency Medical Technician
HIT	Health Information Technology
HRT	Horticulture
MED	Pre-Medicine
MIM	Medical Imaging
MLT	Medical Laboratory Technology
NUR	Nursing
OCC	Pre-Occupational Therapy
PHR	Pre-Pharmacy
PPT	Pre-Physical Therapy
VET	Pre-Veterinary

BUSINESS

CODE	TITLE
ACC	Accounting
AOS	Administrative Office Systems
BUS	Business Administration and Management
CIS	Computer Information Systems
FSM	Food Services

COMMUNICATION ARTS

CODE	TITLE
ART	Art
COM	Multimedia Communications
ENG	Technical Communication
FOR	Foreign Language
HUM	Humanities
LTA	Library Technical Assistant
MUS	Music
PHI	Philosophy
SPE	Speech
THE	Theatre

CONTINUING & ADULT EDUCATION

CODE	TITLE
ABE	Adult Basic Education and Literacy
ASE	High School Completion
ESL	English as a Second Language
PER	Personal Development
PRO	Professional Development
VOC	Vocational Skills General

ENGINEERING, MATHEMATICS, AND PHYSICAL SCIENCE

CODE	TITLE
ABR	Automotive Collision Repair
ARC	Architectural Technology
AUT	Automotive Technology
BCT	Building Construction Technology
CAD	CAD-Drafting Technology
CIV	Civil Technology
CNA	Cisco Networking
CNC	Computerized Numerical Control
DFT	Drafting Certificate
EAP	Electrician Apprenticeship
EGR	Engineering
ELC	Electrical Electronic Maintenance
ELT	Electrical/Electronics Engineering Technology
EMF	Electronics Manufacturing Technology
FST	Fire Science Technology
GEO	Geology
IMR	Industrial Maintenance/Repair
MCD	Mechanical Engineering Technology
MCS	Computer Science
MTH	Mathematics
MTT	Machine Tool Trades
PHY	Physics
RAC	Refrigeration, Heating, and Air Conditioning
WLD	Welding
WWW	Water-Wastewater

PHYSICAL EDUCATION AND RECREATION

CODE	TITLE
PED	Physical Education
REC	Recreation

SOCIAL SCIENCE

CODE	TITLE
ANT	Anthropology
CRJ	Criminal Justice
ECE	Early Childhood Education
ECO	Economics
EDU	Elementary Education
GEG	Geography
HST	History
HUS	Human Services Program
PSC	Political Science
PSY	Psychology
SOC	Sociology

COLLEGE OF LAKE COUNTY
19351 WEST WASHINGTON STREET • Grayslake, Illinois • 60030-1198
(847) 543-2000
www.clc.cc.il.us

See back page for application