

1994 - 1995

C A T A L O G



SUCCESS STORIES WRITTEN HERE

College of Lake County
Twenty Fifth Anniversary
1969-1994



On the Cover

Five faces of success: (Clockwise from center) John Lillstrom, associate in science, 1973; Eleanor Murkey, Lakeshore Campus associate dean and former CLC student; Lorena Barrera, associate in science, 1994; Kent Belasco, associate in arts, 1973; and Elizabeth Pirman, CLC history instructor since 1969.

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This catalog is in effect for the academic year 1994-95.
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

People measure success in different ways. Some measure it by public recognition for achievement; others by dollars earned; still others by personal satisfaction and happiness. For almost 25 years now, the College of Lake County has measured its own success by how well it has helped students define and achieve success in their own terms. For this reason, we've chosen "Success Stories Written Here" as our theme for the college's 25th anniversary celebration which begins this fall.

This year's catalog reflects our anniversary theme. That's appropriate because a college catalog is, in so many ways, a handbook for success. It outlines the requirements for degrees, summarizes policies, describes courses and directs students to support services. It provides information students need in order to succeed at the college.

Going beyond this basic information, our 1994-95 catalog also focuses on individual success stories. We believe that the college's impact on the community is best understood through such personal stories. In that spirit, we've featured five faces of success on the cover: Kent Belasco and John Lillstrom, two alumni of the college's early days who have gone on to highly successful careers in business; Liz Pirman, a 25-year veteran faculty member who still brings excitement and energy to the classroom; Eleanor Murkey, associate dean of the college's Lakeshore Campus, who was herself a student here in 1969; and Lorena Barrera, a very active recent student who served on the committee which planned the anniversary celebration.

These talented people found opportunities to write their own success stories at the College of Lake County, and they have generously shared their stories in the pages of this catalog. Their stories are only five of the many, many stories that could be told by the nearly 300,000 students who have taken classes at the College of Lake County since its doors opened in 1969.

Success stories continue to be written at CLC. You'll find them in the classrooms of veteran instructors like Liz Pirman, Ed Kanwischer, Camille Taylor, Joe Johnson and their many colleagues who began teaching here in 1969. You'll also see a commitment to student success in the classrooms and offices of newer faculty, like Diane Williams, Patrick Gonder and Jim Dorsey.

Walk around campus, and you'll see other success stories in offices like the counseling center where Director Nancy Bentley and her staff work daily to help students develop concrete plans to achieve their goals. Stop by other offices like financial aid and you'll find success stories there, too, as Director Herschel Wallace and his staff help students find the resources to pursue their dreams.

I encourage you to use this catalog as a starting point to learn more about CLC. Read its pages and learn how the college can be part of your own success story.

A handwritten signature in cursive script that reads "Daniel J. LaVista".

Daniel J. LaVista
President

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The College of Lake County affirms and adheres to a policy of
equal opportunity in all aspects of education and employment.

Information in this catalog is accurate as of April, 1994,
but is subject to change.

1994 Fall Semester

August	15-20	Faculty and Staff Advisement, Registration and Staff Development Week
August	22	Classes begin
September	5-6	Labor Day Recess (no classes)
October	18	Mid-Semester
November	23-27	Thanksgiving Recess (no classes)
December	2	Last Day to Remove "I" Grade from Spring Semester or Summer Session, 1994
December	12-18	Final Exams
December	18	Semester Ends

1995 Spring Semester

January	17-21	Faculty and Staff Advisement, Registration and Staff Development Week
January	23	Classes Begin
March	19	Mid-Semester
March 27- April	April 2 28	Spring Vacation (no classes) Last Day to Remove "I" Grade from Fall Semester 1994
May	15-21	Final Exams
May	20	Commencement
May	21	Semester Ends

1995 Summer Session

June	12	Classes Begin
July	4	Independence Day Holiday (no classes)
July	9	Mid-Session
August	5	End of Session

1995 Fall Semester

August	21-26	Faculty and Staff Advisement, Registration and Staff Development Week
August	28	Classes Begin
September	4-5	Labor Day Recess (no classes)
October	24	Mid-Semester
November	22-26	Thanksgiving Recess (no classes)
December	1	Last Day to Remove "I" Grade from Spring Semester or Summer Session, 1995
December	18-22	Final Exams
December	22	Semester Ends

1996 Spring Semester

January	16-20	Faculty and Staff Advisement, Registration and Staff Development Week
January	22	Classes Begin
March	18	Mid Semester
March	25-31	Spring Vacation (no classes)
May	3	Last Day to Remove "I" Grade from Fall Semester 1995
May	13-19	Final Exams
May	18	Commencement
May	19	Semester Ends

1996 Summer Session

June	10	Classes Begin
July	4	Independence Day Holiday (no classes)
July	8	Mid-Session
August	4	End of session

Success Stories Written Here

A unique perspective

A CLC student during the college's first year of classes in 1969, Lakeshore Campus Associate Dean Eleanor Murkey brings a truly unique perspective to the college's administration.

"Certainly, having been a student here helps you remain sensitive to student needs," she says, smiling. Having been here at the beginning also helps sustain a sense of idealism.

"Coming to school here in 1969 was a tremendous adventure," she recalls. "We were all so idealistic. We would solve the problems of the world at the vending machines in building 1."

Still, Eleanor believes the college has measured up to much of that youthful idealism, providing a place where students from many backgrounds could come together for an education.

"There was a lot of diversity in age and experience among the students in 1969," she says. "That was a real strength. It's still a great strength of CLC."

Through her work with the NAACP, Eleanor was involved with the college even before it was formally established. "The NAACP was a great supporter of starting a college to serve the entire community," she says. "When the college did get started, it was natural for me to enroll."

Eleanor attended CLC part-time for two years then transferred to Northeastern Illinois University, earning a B.A. in urban studies. Later, she earned her M.A. in human resources development at National College of Education.

As a student, Eleanor never dreamed she would work for the college. But in 1975 she was hired as director of outreach for the storefront center that was a precursor to the Lakeshore Campus. Through the years, her career advanced with the growth of the college and the Lakeshore Campus. Lakeshore became an official campus in 1985 and Eleanor was named associate dean in 1990.

"I took that first job at CLC with the idea of outreach, of bringing classes to students who need them," she says. That's still her goal and the reason she's particularly proud of the college's recently announced plans to purchase the former Globe department store building to expand the Lakeshore Campus.



Eleanor Murkey
Associate Dean Lakeshore Campus
CLC Student in 1969

CLC Mission and 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 was first granted full accreditation and membership in the North Central Association of Colleges and Secondary Schools in March, 1974. The college was reaccredited in 1979, and most recently in 1986 for a period of ten years.

The College of Lake County strives for excellence by responding to those needs through flexible curricular offerings and student services and by maintaining academic standards which will lead to competence and encourage the pursuit of excellence. To these ends 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 development of basic skills essential to its students. 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 of providing education and training for business and industry. The college assures equal access and opportunity for all individuals regardless of race, ethnic origin, creed, gender, age or non-disqualifying disability.

Consistent with this philosophy, the College of Lake County sets forth the following goals:

1. An exceptionally wide variety of learning opportunities, available within a close community atmosphere, which feature:
 - a. Ready accessibility of the professional staff.
 - b. Class size conducive to open discussion and student/teacher rapport.
 - c. Meaningful academic advisement by professional staff members who can individualize responses to each student's needs and desires.
 - d. A comprehensive program of social, vocational, financial and placement counseling to achieve academic success and greater self-understanding.
 - e. Opportunity to earn credit for prior learning experiences.
 - f. Learning resources to meet a wide range of vocational, intellectual and developmental needs.
 - g. Involvement in co-curricular social, physical, recreational and cultural activities.
 - h. Basic skills instruction according to student needs assessment to ensure that each student shall have the opportunity to acquire the requisite skills in reading, writing, and mathematics for success in the curriculum of his/her choice.
 - i. Provision for students with disabilities for assessment, accommodation, services and referrals to meet their educational and vocational needs.



2. Baccalaureate transfer curricula that provide:
 - a. Liberal arts and science programs leading to the Associate in Arts (A.A.) or Associate in Science (A.S.) degree, with an opportunity for full transfer of credit to a four-year college or university for baccalaureate studies.
 - b. Classroom education designed to enable students to excel in their performance at a four-year transfer institution.
 - c. Comprehensive learning for the graduate at the associate level to function as a member of an educated community in a knowledgeable and appreciative manner.
3. Career-oriented curricula that provide:
 - a. Specific vocational and technical programs leading to an Associate in Applied Science degree (A.A.S.).
 - b. Opportunity for immediate employment in semi-professional or skilled technical fields, or transfer for further professional training.
 - c. Acquisition of entry-level competence and background knowledge in a career field.
 - d. Awareness of career possibilities and potential rewards in a career field.
 - e. Satisfaction of personal interests and needs through the achievement of advanced learning and employment potential.
4. Adult and continuing education programs that provide:
 - a. Strengthening of personal commitment to the principle of life long learning.
 - b. Unique educational job training and upgrading opportunities for adult students already employed or seeking career enhancement.
 - c. Non-traditional learning experiences and subject matter which are in keeping with the integrity and identity of a community-based institution.
 - d. Activities aimed at the personal development and cultural enrichment needs of individuals and groups.
 - e. Adult education courses, including courses in preparation for the high school equivalency examination (GED), English as a Second Language (ESL), adult basic education (ABE), and prevocational training.
 - f. Community services that will enhance the quality of life in the district for the maximum number of citizens.
5. An emphasis on liberal education that fosters:
 - a. The development of skills in communication, thinking, decision-making, and problem-solving.
 - b. The perception of self as a unique member of the world who has self-worth, personal human rights, and potential which can be developed.
 - c. An understanding of human relatedness which stresses the culture past, present, and future shared by human beings and which develops an awareness of personal responsibility as part of a total global community.
 - d. An ecological perspective on the relation between the individual and all other human beings with nature.
 - e. A comfort with the study of the sciences, social studies, technologies, humanities, and fine arts that allows individuals to learn and to apply their knowledge to daily realities.
 - f. An interdisciplinary view of learning that shows relationships between all disciplines and encourages a life long search for knowledge.
 - g. An enjoyment of the pursuit of knowledge and cultural heritage as an end in itself.
 - h. An emphasis on the diversity and value of world cultures and on the importance of an international and multicultural perspective.
6. A commitment to the economic well being of the community and support for its economic development through programs that provide:
 - a. Job skills training for the county's work force.
 - b. Business services for new and growing businesses.
 - c. Basic literacy education for new and for current workers.
 - d. Assistance in the transfer of technology to business.
 - e. Job search and placement assistance.
 - f. Training and education to prepare workers for new, emerging, or changing jobs.
 - g. Employer education to improve work force benefits and workplace environment to increase employee retention.

Success Stories Written Here

Pioneering

When history instructor Elizabeth (“Liz”) Pirman talks about her first year of teaching at GLC, her eyes sparkle and her mouth breaks into a broad smile. As she gestures to make a point, her hands reach out as if to share her energy and enthusiasm with her listener.

“I was hired in the summer of 1969 and started teaching that fall,” she recalls. “It sounds like a cliché, but we were pioneers. We had to make things up as we went along—everything from the curricula to solving day-to-day problems like not having a blackboard in one of the new ‘temporary’ buildings.”

The “temporary” classrooms are still with the college on the north campus. Liz recalls them fondly as representative of the college ambiance in 1969, a symbol of the emphasis on innovation and creating a college where previously there had only been empty fields. Tackling a few inconveniences was just another stimulating part of the challenge.

“My original faculty orientation was conducted at the Presbyterian Church in Grayslake because there were plumbing problems in the new temporary buildings. Early in the fall semester, we had classes cancelled a few times for the same problem. It didn’t matter; we were so enthused about getting the college started.”

Everyone on campus seemed to share the enthusiasm, Liz recalls. That spirit was reinforced by the mood of the times. “You have to remember this was the period that the counter-culture emerged,” Liz says. “The mood of the culture was energetic, questioning, willing to try new things.”

Along with the excitement of the era, Liz recalls a special emotional warmth on campus. “You knew everybody. There were about 80 original faculty members, and faculty in different disciplines had offices next to each other. You probably knew all the students, too. It was a wonderful, cozy feeling.”

Liz finds much of that friendly atmosphere still present on campus, and she still brings infectious enthusiasm to the classroom. “I feel I’ve done a good job when students are responding, discovering, linking the past with the present. Sometimes you can just see the light bulb going on over their heads.”

Still, that first year of classes remains special to her. “We had so much fun. And we were young, too!”

Other founding faculty still at the college are noted on the faculty and staff listing on page 172.



**Elizabeth Pirman
History Instructor
Founding Faculty Member**

Programs of Study and Educational Options

The College of Lake County offers its students a variety of educational options. Many students come to CLC looking for education that will lead immediately to a satisfying career. Other students come to gain college credit that they can 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 simply to continue the process of life long learning. Some students come to the college undecided about their futures.

Transfer Education

Students who come to the College of Lake County to earn credits which can transfer to a four-year college or university will find a wide range of programs designed to prepare them for work at the junior level after they transfer. These programs lead to either the Associate in Arts degree (A.A.) or the Associate in Science degree (A.S.) at CLC. Classes in these programs parallel those offered in the first two years of a four-year institution.

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

Requirements for the Associate in Arts and the Associate in Science are listed on pages 36-38.

Career Education

Many students at CLC are working to gain enough skill and knowledge in a field so they can find a job in that career area when they leave the College of Lake County. 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 enter 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 reeducating 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 50 percent of all job opportunities will require education beyond high school but less than a four-year degree. Career programs prepare the student to step directly into this fast-moving age of technological change.

All students seeking career education will find a large number of specific programs. 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, several joint educational agreements that are in effect allow students to attend programs not offered at CLC through 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 will pay \$46.10 per credit hour (not including lab and materials fees).

The four Illinois institutions 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 Board of Vocational Education and Rehabilitation.

The programs offered through joint agreements and their respective institutions are indicated on page 35. For program listings, additional tuition information and authorization to attend these institutions, interested individuals should contact the Office of the Dean of Instruction Transfer/Adult Continuing Education at ext. 2422.

Questions about career programs should be directed to the Office of the Dean of Instruction/Career and Technical Education, ext. 3614.

Continuing Education

Continuing Education activities at the College of Lake County offer educational experiences for adults who have personal interests and professional needs. To promote students' ability to learn throughout their lives, the college offers continuing education courses in many modes ranging from one-day seminars and workshops to longer courses and institutes.

Credit-free courses, workshops, seminars, and conferences are held on a wide range of subjects. These activities are offered as a public service to the community. Their main purpose is to encourage and heighten life long learning outside the constraints of credit offerings.

Vocational skills credit courses are offered to individuals who have learning goals which fall outside those of career education certificates or associate degree programs. No course with a GS prefix applies toward graduation in Career Education Certificate or Associate Degree Programs. For specific information on this program, please call the office of Continuing Education at ext. 3616.

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 progress at their own rates through basic reading, writing, and arithmetic skills.
2. English as a Second Language (ESL) classes are for students whose primary language is not English. Speaking, reading, and writing skills in English are learned. Students may enroll in one of three levels: Beginning, Intermediate or Advanced, 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. Persons successfully passing the GED exam can be 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) classes are designed to introduce the various types of vocational opportunities available in industry. Information on each vocation is presented so that the student can make an informed choice of work she/he would like to pursue.

Center for Economic Development

Since 1981, the Center for Economic Development (CED) has provided comprehensive and professional services for Lake County businesses, manufacturers, professional groups, and local government. The Center aids in enhancing economic development of the county by providing assistance in the following areas:

Business-Industry Training Center

The Business-Industry Training Center provides Lake County employers with a wide range of instructional programs to train, retain or upgrade the skills of their employees. Training features include customization, on and off-site programs and program development to meet special needs.

Programs include training in manufacturing technologies, industrial skills, managerial and supervisory skills, computer skills, workplace literacy, basic skills development, English as a Second Language, total quality management, implications of workplace legislation (e.g., Disabilities Act). On-site offering of 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 economic environment of the 90's.

Regional Small Business Development Center

The RSBDC offers one-to-one confidential consulting for both start up business and company expansion and coordinates educational workshops and training programs on marketing, accounting, loan packaging, and franchising.

Self-Employment Training Program

The SET program provides high quality technical assistance, education, training, and follow-up counseling for eligible entrepreneurs or new emerging businesses.

Procurement Assistance Center

The Procurement Assistance Center's mission is to help local Illinois companies compete for government contracts. Center staff help both "beginner" companies and experienced contractors to break into new government markets and expand sales. Companies are provided bid leads about upcoming contracts and training in how to market to targeted agencies.

A unique computer system is available to match client company products to the agencies who buy those products. Military specifications and standards and reference documents are also available for company use.

Small Business Export Development Center

The Small Business Export Development Center (SBEDC) assists small and mid-sized companies through all phases of entering new export markets. Through individual counseling the SBEDC will provide you with an assessment of your company's readiness to export relevant market research on potential markets for your product, listing of possible agents and distributors to represent your product abroad, trade leads for your product, and referrals to other pertinent providers of international services. The SBEDC also conducts seminars on various exporting topics.

Other Educational Options

Skills Enhancement Program

Instruction in basic skills is an integral part of the College of Lake County's academic program. The college is committed to the development of the reading, writing, and mathematical skills that are necessary for success in college-level courses and programs. Because of this commitment, the college requires that all new students who plan to take more than two college-level courses must meet the basic skills requirements specified for each of those courses.

Students who lack the prerequisite skills will be required to enroll in one or more of the courses in the Skills Enhancement Program. They include English 105, Introduction to College Writing; English 107, Introduction to College Reading; and Mathematics 101, Elementary Concepts of Mathematics.

Students who speak English as a second language may be required to enroll in academic ESL classes such as English 090, 091, 092, 093, 094, 095, and 096. Placement in specific courses will depend on scores on ESL placement tests and recommendations of faculty.

Testing

One proof of evidence will be scores on the Basic Skills Assessment tests which are administered in the testing center in the LAC. The Basic Skills Assessment includes a reading test, language usage test, and a mathematics test. This test battery is administered at the following CLC campus centers. Please call for further information.

- 1) College of Lake County, Grayslake 223-3613
- 2) Lakeshore Campus, Waukegan 623-8686
- 3) Southlake Educational Center, Highland Park 433-7884

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 skill courses in math, reading or writing, should contact a counselor, Skills Enhancement Program advisor, LAC staff or the appropriate division office:

Engineering, Math, Physical Sciences:
Room B162, ext. 2498.

Communication Arts, Humanities, and Fine Arts:
Room B237, ext. 2550 and 2587.

Counseling Center: Room C110, ext. 2572.

Individual tutoring is available in the Learning Assistance Center. If you have a question about tutoring, come to the Learning Assistance Center where you'll find both trained professionals and fellow students to help you improve your academic skills.

The Writing Center offers individual support for all levels of writing ability. Peer and specialist tutors will assist students in identifying their strengths and weaknesses, to become more confident and more proficient writers.

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 math anxiety workshops and supplemental videotapes, audiotapes, workbooks and software.

Programs of Study and Educational Options

Cooperative Education

For students who wish to combine their on-campus education with learning in the world of work, the college offers Cooperative Education, or CO-OP. The CO-OP program provides eligible students with the opportunity to earn college credits for new learning in a present or new job.

For those students who are seeking work experience, the Cooperative Education department assists students with job search information including resume help, mock interviews and job leads. Also offered is a one-credit seminar portion of CO-OP which focuses on job search skills and the psychology of the workplace. The seminar is required of 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 the work experience, each student must develop a written educational plan which includes measurable learning objectives. Guidance and supervision are provided regularly by faculty sponsors in cooperation with the employer.

Contact the Cooperative Education Coordinator for further information (223-3611). See EWE Courses on page 114.

Prerequisites:

1. Nine credits toward the student's career or transfer program (45 credits if pursuing an AAS in Data Processing).
2. CO-OP Coordinator and faculty sponsor approval.

International Studies

The College of Lake County recognizes the importance of providing opportunities for students to develop an understanding of the interdependence of people and nations in today's world. The college therefore provides students with a variety of courses which contribute to an understanding of the relationships between other nations' cultural, economic, and political systems and our own. The college also participates in a foreign study program where students reside and study in another country for an extended period.

Resident Foreign Study Program

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; Salzburg College in Salzburg, Austria; and Costa Rica. These affiliations permit consortium members to provide their students with a resident foreign study program during fall and spring semesters. The curriculum emphasis is on courses in art, foreign language, history, humanities, literature and music with additional subject areas offered as appropriate. All courses may be used to fulfill graduation requirements or as electives for the transfer degree.

Studying abroad affords students a unique opportunity to integrate the distinctive resources available in other countries to enhance and broaden their understanding of these courses. In addition to course related travel and activities, students may have the occasion to travel to other European countries. Qualifications for admission to the foreign study program include completion of 15 hours of college credit with a minimum GPA of 2.75 and two letters of reference. For further information contact International Education Coordinators, Nancy Cook, A233, ext. 2733 or Bob Kerr, A237, ext. 2733.

Field Study

In addition to providing education in the classroom, lecture hall, and laboratory, the CLC faculty also direct field study through a variety of biology, geology, and humanities courses that make the Everglades, the Rocky Mountains, Paris, or Kenya their classroom. The **class schedule** provides information about the specific field study or travel courses which are being offered in a given semester.

Telecourses

The college offers students several non-traditional ways of earning credit. Several courses in business, social science, humanities and physical education can be taken by television. This delivery system allows students to work on the course in their own home on cable television, viewing video tapes at several local libraries, or through videotape checkout, under the supervision of a qualified professional. For information about telecourses, call the Director of Educational Technology at ext. 2441.

Distance learning network

A new interactive distance learning network has been implemented at the College of Lake County, linking CLC with five other colleges and universities and expanding educational opportunities for CLC students. Credit classes will be offered through this system, allowing CLC students to attend classes and earn credits offered by CLC and other institutions without leaving the campus.

The distance learning program was developed through the North Suburban Higher Education Consortium which includes CLC, DePaul University, National-Louis University, Oakton Community College, William Rainey Harper College and Northeastern Illinois University. The program was funded by a \$15 million statewide 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 the instructor and students to see and hear each other at all classroom sites. For more information, call the Director of Educational Technology at ext. 2441.

Success Stories Written Here

A good start

"When I think of CLC, I think of those early module buildings not the big buildings on campus today," recalls 1973 graduate John Lillstrom. "The education was functional—no frills—but you got a very solid education. The students felt the college was really committed to teachers and teaching," he says.

When John enrolled at CLC in 1971, the campus was energized with excitement. Barely two years old, the college was in its initial growth phase, housed in the six temporary buildings that are now the North campus. An important backdrop to the innovation on campus, was the climate of change and social unrest of the Vietnam era.

"Our 'demonstration area' was the grassy space between the temporary buildings," John remembers. "Another demonstration site was the student center. That was also a major target for streakers," he says, recalling the early 1970s disrobing fad.

John earned an associate in science and transferred to Northern Illinois University in DeKalb where he earned a bachelor of science degree in biology and environmental studies. Today, he is the coordinator of research and development of corn products for the French-owned company Limagrain Genetics, the world's third largest seed company. His job involves supervising plant research and product development, with frequent trips to the company's headquarters in France. He feels his CLC experience was a terrific educational base.

"The quality of teaching was very high. I had no problems going on to Northern. The instruction was easily as good or better than at Northern; better, really, because we had so much contact with instructors."

John's wife Brenda also attended a community college. Both are strong believers in the value of the community college system. "There's no way we would send our kids to a four-year school right away," he says. "The growing-up period a community college offers students is invaluable. Besides, I think community colleges do a better job grounding students in the basics."

John sums up his CLC experience this way: "I'm a satisfied customer."



John Lillstrom
Associate in Science
Graduated in 1973

Admission Requirements, Advisement and New Student Information

The College of Lake County (CLC) welcomes all who can benefit from the courses and programs offered, including high school graduates, others 18 years of age and older, and those less than 18 years of age who meet established criteria. Admission to the college does not ensure entrance into a particular course or program of study. 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.

The college expects all students either to possess at the time of admission or acquire through appropriate study, the basic reading, writing, and mathematical skills that are necessary for success in the courses or programs of study they choose. New students will be granted admission to one of three categories after the credentials outlined below are received in the Office of Admission and Records. 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.

Category I:

This category includes those students who have provided evidence of college-level reading, writing, and mathematical skills as a prerequisite for enrollment in courses designated as requiring those skills.

The following credentials are required:

1. Completed CLC Application for Admission form.
2. If less than 18 years of age, either a completed CLC Secondary School Reference form or an official transcript of high school record showing date of graduation/withdrawal.
3. **ONE** of the following records to demonstrate basic reading, writing, and mathematical skills:
 - 3.1 Official transcript of high school record showing top 1/3 rank in class after six semesters.
 - 3.2 Official transcript from an accredited college/university record listing at least 30 semester hours of credit with no grade less than "C" or credit equivalent to the following or higher level courses at CLC:
Reading: ENG 107 - Introduction to College Reading.
Writing: ENG 105 - Introduction to College Writing.
Math: MTH 101 - Elementary Concepts of Mathematics.
 - 3.3 CLC Basic Skills Assessment scores as follows:
Reading: Score of 31 or above.
Writing: Score of 30 or above.
Math: Score of 41 or above.
 - 3.4 American College Test (ACT) standard scores as follows:
Reading: Score of 17 or above in social science.
Writing: Score of 17 or above in English.
Math: Score of 17 or above in mathematics.

3.5 Scholastic Aptitude Test (SAT) standard scores as follows:

Reading: Verbal score of 400 or above; or reading comprehension score of 40 or above.

Writing: Verbal score of 400 or above; or Test of Standard Written English (TSWE) score of 40 or above.

Math: Math score of 400 or above.

3.6 Official transcript of General Educational Development (GED) tests listing standard scores as follows:

Reading: Score of 55 or above in reading skills.

Writing: Score of 55 or above in writing skills.

Math: Score of 55 or above in mathematics.

3.7 Evidence of an associate or higher degree from an accredited college or university.

Category II:

This category includes those students who have provided evidence of basic reading, writing, and mathematical skills which demonstrates that they can benefit from enrollment in skill enhancement courses.

The following credentials are required:

1. Completed CLC Application for Admission form.
2. If less than 18 years of age, either a completed CLC Secondary School Reference form or an official transcript of high school record showing date of graduation/withdrawal.
3. **ONE** of the following records to demonstrate basic reading, writing, and mathematical skills:
 - 3.1 CLC Basic Skills Assessment scores as follows:
Reading: Score of 37 or below.
Writing: Score of 39 or below.
Math: Score of 19 or below.
 - 3.2 American College Test (ACT) standard scores as follows:
Reading: Score of 16 or below in social science.
Writing: Score of 16 or below in English.
Math: Score of 16 or below in mathematics.
 - 3.3 Scholastic Aptitude Test (SAT) standard scores as follows:
Reading: Verbal score of 399 or below; or reading comprehension score of 39 or below.
Writing: Verbal score of 399 or below; or Test of Standard Written English (TSWE) score of 39 or below.
Math: Math score of 399 or below.
 - 3.4 Official transcript of General Educational Development (GED) tests listing standard scores as follows:
Reading: Score of 54 or below in reading skills.
Writing: Score of 54 or below in writing skills.
Math: Score of 54 or below in mathematics.

Admission Requirements, Advisement and New Student Information

Category III:

This category includes those students who will limit their enrollment to courses that do not require evidence of prerequisite reading, writing, and mathematical skills; however, with the exception of English 120, English 121, and mathematics courses, students in this category may enroll for a total of two (2) courses that require college-level reading, writing, and mathematical skills but for which students have met all other prerequisites.

The following credentials are required:

1. Completed CLC Application for Admission form.
2. If less than 18 years of age, either a completed CLC Secondary School Reference form or an official transcript of high school record showing date of graduation/withdrawal.

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.

For Students Who Wish to Obtain the Associate in Arts or Associate in Science Degree

Students who wish to obtain an Associate in Arts or Associate in Science degree must provide evidence that they have mastered a body of knowledge in the arts and sciences through previous learning. In order to be admitted unconditionally to the Associate in Arts or Associate in Science degree, a student must observe the following procedures.

1. Complete successfully the requirements for Category I status. See page 15 for further information.
2. Furnish to the Admission and Records Office EITHER a high school transcript that reflects successful completion of required subject matter courses:

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 sciences; and

Two years of electives from any combination of **foreign language, music, vocational education or art.**

(PLEASE NOTE: Up to three of the 15 required units of course work may be redistributed by deducting no more

than one unit each from the categories of social science, mathematics, science, and electives and completing those units from one of the other categories.)

OR

an ACT report that indicates the completion of the high school course distribution requirements described above or an ACT composite test score of 21 or higher and a subscore of 21 or higher on each of the following exams: English, reading, mathematics, and science reasoning.

(Exceptions to these procedures that will be considered on an individual basis by the Admission and Records Office include students who have completed 30 or more semester hours with grades of C or better from an accredited college or university, who have completed an associate degree from an accredited two-year college, or who present proof through equivalent test scores and course work.)

Students who wish to pursue the Associate in Arts or Associate in Science degree but who are unable to provide any of the forms of information indicated above will be conditionally admitted to the degree and must complete all of the following prescribed College of Lake County courses:

ENG 121, English Composition I;

SPE 121, Fundamentals of Speech;

MTH 121, Fundamentals of Mathematics, or higher MTH course;

any lab science course from the list required for an A.A. or A.S. degree in this catalog;

any social science course from the list required for an A.A. or A.S. degree in this catalog;

ENG 122, English Composition II, or any humanities course from the list required for an A.A. or A.S. degree in this catalog.

In addition, conditionally admitted students are required to contact an adviser each semester. Please see the section on Advisement on page 17 of this catalog for further information.

For Health Career Programs

Health Career Programs are open to a limited number of students. As a result, medical laboratory technology, health information technology, registered nursing, and medical imaging students must complete a special screening procedure. For specific requirements, refer to Career Program Descriptions starting on page 61.

For Students Who Are Less Than 16 Years Of Age

A student less than 16 years of age must be judged by both the high school and the college 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 less than 16 years of age is required to submit the credentials outlined below to the Office of Admission 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 associate 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 meet the following requirements, and must submit the credentials outlined to the International Education Coordinators, Bob Kerr, Social Sciences (A237, ext. 2733), or Nancy Cook, Humanities (A233, ext. 2733) for admission.

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 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 Basic Skills Test, the student is able to take only a limited number of courses in the Skills Enhancement Program.
3. The student must show financial responsibility by demonstrating that he or she has access to \$16,000 U.S. dollars in a bank account 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 will be 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 I-20 immigration form to the student. The student must take the I-20 form, financial forms, and evidence of intent to return to the home country to the U.S. Consulate Office in the home country. The Consular Office actually issues the F-1 visa.
6. The student must be a full-time student. The student must register 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 the first year as an F.I. student, unless they can claim extreme hardship.
10. Deadlines: May 1 for fall semester, November 1 for spring semester and April 1 for summer session.

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

Advisement

The College of Lake County believes that students will plan their academic careers most successfully when they receive correct information about college policies and procedures and when they are guided by an academic advisor.

Therefore, new students are encouraged to

- attend a College Information Session (CIS)
- meet with a counselor if they have not selected a major or need assistance in developing their educational plans, or meet with a faculty advisor if they have already identified a major.

Unconditionally admitted A.A., A.S., and A.A.S. degree and certificate seeking students are required to contact an adviser prior to enrolling for their 19th credit hour and again prior to the 41st credit hour.

Conditionally admitted A.A. and A.S. degree seeking students are required to contact an adviser each semester.

Each semester, students who are pursuing a degree or certificate will be asked to verify their major. If a student wishes to change majors, she or he must see a faculty adviser, divisional assistant, or counselor.

Prior to enrolling for the 19th credit hour, non-degree seeking students who are enrolling in transfer and/or career credit courses are expected to contact a faculty adviser or divisional assistant in their major area or a counselor if they are undecided about their academic work.

Success Stories Written Here

Renaissance man

Today, Kent Belasco is an unabashed advocate of the value of higher education. A member of CLC's General Advisory Council—a group that serves as a liaison between the college and the community—Kent holds an associate in arts degree from CLC, a bachelor of arts degree with a joint major in art and sociology from Lake Forest College and a master of business administration degree from Lake Forest Graduate School of Management. Additionally, he is working toward a doctorate in business education at Northern Illinois University. He applies that education daily in his position as chief information officer and director of information systems at First Midwest Bank Corp., based in Naperville.

Kent wasn't always so committed to higher education. He credits CLC with his change in attitude.

"I was in a motorcycle accident in 1969 that turned my plans around," he says. "Up until that point I was very sports-oriented. I probably thought of college in vague terms, as something in the future, after the Army."

"The accident changed my plans. I came to CLC in 1971 not really sure of what I wanted to do. At one point, I almost dropped out. Art history instructor Nancy Cook helped me sort out my thinking. She even helped me get back into the classes I had dropped."

CLC's commitment to students so impressed Kent that he has stayed involved with the college over the years. "My work with the General Advisory Council isn't just a payback for what the college has given me," he says. "I want to stay involved. I always felt good about my CLC experience. When you feel good about something, you want it to grow and succeed. I want to help other people see what the college can offer Lake County."

A Renaissance man, Kent is the author of four books on banking and an accomplished artist, exhibiting his pen and ink drawings at juried shows in Lake County. Asked about his busy lifestyle, he answers simply: "I like to stay busy. It's not the end result but the process. Doing lots of things makes me feel alive. CLC helped me get a good start, and my wife Carol has given me a lot of encouragement. Now when I tackle new things, I say 'why not?'"



***Kent Belasco
Associate in Arts
Graduated in 1973***

Tuition and Fees

Tuition and fees are subject to change through action by the CLC Board of Trustees, or by the calculation of out-of-district fees in accordance with the state formula. Tuition and fees effective for fall of 1994 are as follows:

In-District	
Tuition (per credit hour)	\$41.00
Comprehensive Fee (per credit hour)	3.00
Total Tuition and Fees	\$44.00

Tuition and fees for courses of a credit-free nature (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 semester basis. Please refer to the current class schedule for this information.

Residents of the College District

Students who are 18 years of age or older who have occupied a dwelling within Community College District 532 for at least 30 days prior to enrolling at the College of Lake County, are considered "in-district," except the following:

- federal job corps workers stationed in the district;
- members of the armed services stationed in the district;
- inmates of state or federal correctional/rehabilitation institutions located in the district;
- students attending under the provisions of a chargeback or contractual agreement with another community college; and
- students attending a postsecondary educational institution in the district who have not demonstrated through documentation a verifiable interest in establishing permanent residency.

Unemancipated students under 18 who have at least one (1) parent, stepparent 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, Zion-Benton.

Residents of Illinois and Out-of-District Students

A person who resides in Illinois, but is not a resident of Community College District 532, as defined above.

Lake County, Illinois, residents living within the following public high school district will be classified as Out-of-District Illinois Resident Students: Barrington.

Out-of-State Residents

A person who is not a legal resident of the State of Illinois.

Senior Citizens Tuition

All in-district residents who are 60 years of age or older at 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 65 years of age or older at the time of registration and who qualify financially according to Illinois Senate Bill 338 may enroll in credit courses offered by the college without paying tuition or activity fees. Contact the Financial Aid Office for specific details.

Business Educational Service Agreement

The college may enter into written agreement with an in-district business, industry, or agency to provide instruction as a part of that organization's in-service development program. Individual students enrolling under such an agreement will be subject to the current in-district tuition rate including the prevailing activity fee. Contact the office of Student Recruitment for information.

In-District Military Personnel Tuition

Military personnel who are citizens of the United States and who are on extended active duty in one (1) 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 be subject to 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.

Financial Information

Fees

Commencement

A commencement fee, which includes the cap and gown, is assessed 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

The college will issue, free of charge, a semester grade report at the end of each semester or session to all students who were enrolled during that semester or session. A fee of \$1.00 will be charged for each additional transcript of the complete academic record.

Course Fees

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

Additional

Additional student expenses will 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, fees, and bookstore purchases. There are provisions for students to 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 you answer that question, the college has developed two standardized budgets for the 1994-95 school year. There may be minor variations in these figures due to tuition increases or changes in federal guidelines.

Dependent Student Budget: (Based on 9 months)

Tuition and Fees	\$1,233.00
(Based on 12 credit hours per semester)	
Books and Supplies	600.00
Room and Board	1,500.00
Personal Expenses	1,400.00
Transportation	\$1,080.00
	<hr/>
	\$5,813.00

Independent Student Budget: (Based on 9 months)

Tuition and Fees	\$1,233.00
(Based on 12 credit hours per semester)	
Books and Supplies	600.00
Room and Board	3,240.00
Personal Expenses	1,560.00
Transportation	1,320.00
	<hr/>
	\$7,953.00

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 for a number of programs with neighboring community colleges. Through a joint agreement, a resident of District 532 may attend another community college at the other school's in-district rates. All joint agreements are listed on page 35 of this catalog.

A second method is the chargeback. Through a chargeback system an individual applies for approval to register at an 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/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. Chargebacks 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 chargeback may do so by contacting the Office of the Dean of Instruction Transfer/Adult Continuing Education, ext. 2422.

Tuition Chargeback Out-of-District Residents

Authorization for 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.

Withdrawing from a Course/ Refund Schedule

To officially withdraw from a class, you may complete a "Registration Change" form available in room B101 or call the Office of Admission and Records at ext. 2573. When you find it necessary to withdraw, please take the time to let your instructor know why you are dropping the class.

The date of your OFFICIAL withdrawal determines what your FINAL GRADE will be and whether you will receive a REFUND for the class. If your class meets for 16 or more weeks and if your withdrawal occurs before the end of the 4th week, your permanent record (transcript) will not reflect enrollment in the course. If you withdraw after the 4th week and before the end of the 11th week, a final grade of "W" will be recorded. After the 11th week, you must contact your instructor directly to withdraw. If you are "passing," your final grade will be "W." If you are "not passing," your final grade will be "F." Deadlines are pro-rated for classes that meet less than 16 weeks.

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 received on Monday for classes that began the previous Friday evening (after 4 p.m.), Saturday, or Sunday will be backdated 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	1st 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 associate 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 pro-ration 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 A101.

**Financial Assistance
Available to Students**

Financial aid is designed to help bridge the gap between the student's resources and the costs 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. The financial aid counselor uses 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. There is a loan to meet emergency expenses available to students not based on financial need. There are other sources of financial aid available through the generosity of private citizens and local business organizations.

When you apply for financial aid, you want to make certain that you complete 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. Veterans have other forms to complete. These forms are available in the Financial Aid office.

CLC will report veterans on academic restrictions to the Veterans Administration. Veterans will be required to complete VA Form 22-8873 (Supplemental Information For Change Of Program Or Reenrollment After Unsatisfactory Progress Or Conduct) to have any benefits reinstated. Refer to page 29 for Academic Standards Policy explanation.

For more detailed information concerning financial aid programs, refer to the current Financial Aid Brochure or contact the Financial Aid/Veterans Information Office located in Room B114. Every effort will be made by the Financial Aid office staff to assist students to identify financial aid sources so that they may be able to take advantage of financial aid to help pay college costs.

College of Lake County Foundation

The College of Lake County Foundation is a non-profit organization incorporated under the laws of the state of Illinois. Its purpose is to help provide scholarships and scholarship incentive grants for students at the college. The CLC Foundation also funds innovative educational and cultural programs involving faculty and students. The Foundation's long-range plans include equipment, facilities and endowment fund raising.

In addition, the Foundation serves as an administrative channel for gifts to the college which have included cash, securities, works of art, library materials, and major gifts. All gifts to the Foundation are tax deductible to the extent provided by law.

Success Stories Written Here

A complete college experience

Involvement in all aspects of student life has been Lorena Barrera's goal since she first enrolled at CLC in 1991. "I read all the fliers for activities," she says, laughing. "I wanted to get as much out of college as possible."

A student in CLC's occupational therapy program, Lorena earned her associate in science degree in May. During her years at CLC, she participated in cross country, served as secretary of the Hispanic-Latino club, volunteered in the physical therapy unit at St. Therese Hospital, tutored Spanish in the CLC learning resource center and held down a part-time job as a "unit tech" at Lake Forest Hospital. Her passion for getting involved was an important reason she was asked to serve on the steering committee for the college's 25th anniversary celebration set for this fall.

"We wanted a student representative who was active in many aspects of student life," says Dorothy Regan Drake, chairperson for the steering committee, which is composed of representatives from across the college and community. "Lorena's energy and interest in getting involved made her a natural choice."

Lorena believes opportunities to get involved are an important part of the CLC learning experience. "When I tried out for cross country, I had never been a runner before," she says. "But the coach gave me an opportunity to try. I loved getting up on Saturdays and visiting other campuses where we competed."

The friendly atmosphere at CLC also made it easy to explore new interests, Lorena says. "I've made a lot of friends here and the Hispanic club helped build my self-confidence," she says. "My instructors helped, too. I had teachers like Suzanne O'Brien who remembered me even several semesters later."

Lorena's future plans include exploring other new interests. This summer, she plans to take tennis lessons and enroll in an acting class at the college. In fall 1995, she hopes to enroll in the occupational therapy bachelor's degree program at the University of Illinois at Chicago.



Lorena Barrera
Associate in Science
Graduated in 1994

Academic Assistance

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

Testing Center

The Testing Center provides a centralized testing service where students can complete the GED, ACT, CLEP, Basic Skills Assessment, telecourse testing and nursing checks as well as career and interest inventories. Call 223-3613 for testing information at the CLC campus. Similar testing services are also available at Lakeshore Campus. Call 623-8686 for additional information.

Modular Instruction

Students wishing to improve their vocabulary, basic writing, math or algebra 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 Lakeshore Campus in Waukegan.

CSS 101	College Study Skills
ENG 102	Spelling
ENG 103	Vocabulary
ENG 104	Sentence Structure & Punctuation
LSC 101	Library Basic Skills
MTH 101	Elementary Concepts of Math
MTH 102	Basic Algebra

Tutoring

Tutoring is available for CLC courses in which students are enrolled at the College of Lake County. Tutoring provides extra academic assistance on a one-to-one basis or in a small group setting for students who need additional help with their courses. Individual appointments are scheduled in the LAC with highly qualified tutors in most subject areas. Call ext. 3613 for additional information.

Students with Disabilities

The Learning Assistance Center provides accommodations for students with disabilities. Adaptive equipment such as adjustable desks, tape recorders, voice-activated computer, kurzweil reading machine, and three-wheel scooter are available. Services such as 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 assistance must be supported by appropriate documentation of disability. Call ext. 2747/2721 or 223-0134 voice/tdd for additional information.

Academic Computing

A variety of computing facilities are available to CLC students with equipment ranging from microcomputers to mainframe systems. The twenty-three major academic labs are located as follows: eight in the Business Division, two at the Lakeshore Campus in Waukegan, three in the Engineering, Mathematics, and Physical Sciences Division, three in the Biological and Health Sciences Division, one in the Communication Arts Division, four in the Learning Resource Center and two in the Adult/Continuing Education Division. These 23 sites account for over 30 mainframe and minicomputer terminals, eight high resolution CAD terminals, and over 520 microcomputers.

The remaining academic microcomputers are distributed for instructional support purposes in such diverse departments as health information technology, chemistry, physics, refrigeration and air conditioning, and numerical control. In addition to programming languages, students use several of the leading spreadsheet, database, word processing and computer-assisted instruction (CAI) software packages. The existence of 23 different centers for academic computer activity reflects the college's commitment to decentralize computer technology in order to provide maximum access to computers by faculty and students.

Each year, hundreds of class sessions and thousands of "open lab" students (outside a scheduled class) use our modern facilities for instruction, homework, or individual computing needs. Your instructor will assist you in determining hardware and software requirements for your particular course. Our computer laboratories offer the latest equipment and software:

Hardware

- IBM Mainframe ES9000, Model 170
- Digital Equipment MicroVax
- IBM Personal Systems/2 and Value Point
- IBM Personal Computer/XT
- Gateway 2000, include 80386 through 80586
- Apple Macintosh, Models include Classic through FX
- Apple IIe and IIgs
- Printers are available in every laboratory.

Operating Environments

- IBM Mainframe, VM and DOS/VSE
- PC-DOS, Versions through 6.0
- Macintosh, System 6 and 7
- Apple DOS
- Windows Version 3.0 and 3.1
- Novell Netware and IBM OS/2 LAN Server

Call Educational Technology, ext. 2441 for specific information regarding equipment location and use.

Child Care

CLC offers affordable child care at its state-licensed Child Care Center on the Grayslake campus. Highly qualified staff provide day and evening care for 3 to 12 year olds in separate programs for pre-school and school-age children. Children are enrolled in advance for times based on their parents' class and study schedules. Spaces are limited. Call ext. 2345 for more information on fees, times, and registration.

Counseling Center

The Counseling Center is involved with students' total education. Counseling works primarily with new or prospective students, with students who have basic skill development needs, with undecided students, and with transferring students, as well as with students who have personal concerns that are interfering with college success.

Counseling assists students in their career/life planning, as well as in their personal development and adjustment to the college environment. Students' skill development in areas which are basic to students' satisfactory completion of course requirements such as decision making, value clarification, determination of goals, use of time, and study skills, is fostered by the Counseling staff working in cooperation with other members of the college. Students may work with counselors on an individual basis or in group sessions such as: PDS 120 - Becoming A Successful Student, PDS-121, Human Potential Seminar; PDS-122, Career Exploration Seminar; or other group experiences. All are designed to help students make informed decisions about academic, career, personal, and social issues. Personality, interest, and aptitude tests are available for academic and career counseling.

Counseling services are also available at Lakeshore Campus in Waukegan and the Southlake Educational Center in Highland Park.

The Counseling Information Center services students with the most up-to-date information available about other colleges, technical schools, financial aid, and careers. Included in the center are the catalogs of most U.S. colleges and universities on microfiche and several computer-based guidance systems.

Students can call the Counseling Center at ext. 2572 for information and appointments at the Grayslake campus; 623-8551 for Lakeshore Campus; and 433-7884 for the Southlake Educational Center.

Health Center

The Health Center at CLC provides physical assessments of health problems and primary care for illnesses and injuries,

with appropriate 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 are 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.

Intercollegiate Athletics and Intramural Recreation

Intercollegiate athletics and intramural recreation are also an important part of student life at the College of Lake County.

CLC teams compete in 12 intercollegiate sports. Women's sports include basketball, cross country, 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. Talent-Leadership Awards which provide tuition waivers for selected student athletes are available. The CLC intramural/recreation programs provide a variety of activities for students, faculty and staff.

For more information contact the Office of Health, Physical Education, Intramurals, Recreation and Athletics, ext. 2475.

Job Placement Assistance

Placement services are available to all Lake County residents, CLC students and graduates who are seeking either full-time or part-time employment for regular, seasonal or Cooperative Education openings.

The Career and Placement Services office publishes a weekly listing of job opportunities, "JOBS NOW!," and distributes the listing to Lake County libraries, high schools and social service agencies. Applicants registered with the job listing service receive a weekly computerized listing of those job opportunities which match their experience and interest.

The office sponsors an annual jobs fair and on-campus recruiting throughout the year. County, state and national labor market information is available to interested residents, employers and students. Residents, students, alumni and employers who wish to use any of these services should contact the Career and Placement Services office or the Cooperative Education office in person in room B201 or by phone at 223-3611.

Policies Governing Student Life

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

Obligations to the College

Students may be kept from registering and/or receiving grade reports and transcripts for the following general purposes:

- **Financial/Materials:** A properly authorized agency of the college may restrict a student who has failed to meet financial obligations and/or return materials to the college.
- **Judicial:** The Dean of Student Services may restrict a student who has been suspended or expelled or to contact a student regarding pending judicial or administrative proceeding against the student.
- **Condition of Registration:** The Admission and Records office may restrict a student who has not fulfilled a duly established condition of registration.

Student Records Policy

The Family Education Rights and Privacy Act of 1974 establishes the right of students to inspect their educational records and limits the disclosure of those records to other individuals. The guidelines for implementing the Act, as amended, are as follows:

The purpose of this legislation is to promote fair information practices. That is, persons who are subjects of data systems must be informed of the existence of such systems, be able to learn what data about themselves are on record, be assured that data are used only for intended purposes, be able to correct or amend records, and be assured that those responsible for data systems take reasonable precautions to prevent misuse of data. Information about individuals should be retained only so long as it is valid and useful. Those responsible for data systems have an obligation to destroy information when conditions under which it was collected no longer prevail.

A synopsis of FERPA Guidelines may be obtained from the Director of Activities, the Director of Counseling or the Dean of Student Services. The entire document may be reviewed at the Office of Admission and Records.

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 Research and Planning, Room B201, at the Grayslake campus, ext. 2420.

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/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 total obligations, institute appropriate disciplinary action.

A student may be subject to disciplinary action whenever the student commits or attempts to commit any act of misconduct which occurs on the college campus, during class or at an activity, function or event sponsored or supervised by the college, or elsewhere if 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 misuse of college documents and records, including identification cards.
3. Conduct which significantly interferes with the college's teaching, research, administration, or other responsibilities.
4. Conduct which 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 or unauthorized/illegal use or possession of firearms or any other weapon.
5. Violation of specific college 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; therefore 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 agencies or persons in addition to the college.

Student Life

Sanctions

A. Reprimand

A reprimand is an official statement to the student that he/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/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/her behavior. If the student fails to fulfill the terms of the contract the Dean of Student Services 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 in 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 the right to participate in any academic or other activities of the college and to be on college premises for a specified period of time, not to exceed one semester.

F. Expulsion

Expulsion denies the right to participate in any academic or other activities of the college and 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 would be contingent upon the assessment by college personnel of the written rationale provided in the individual's request for reinstatement and a review of the initial violation causing expulsion as well as upon the individual agreeing to adhere to

behavioral expectations noted in the Preamble of the *College of Lake County Student Rights and Responsibilities*, specifically and concretely delineated, and acknowledging that any violation would result in indefinite expulsion.

Copies of the entire **Student Rights and Responsibilities Policy**, including due process procedures, may be obtained either in the Student Activities office, C101, or the Dean of Student Services office, B201.

Policy For Addressing Students' Academic Concerns

Board Policy 426 is the students' guarantee to due process for addressing academic concerns. This policy describes the informal process which emphasizes initial discussion with the instructor and then the associate dean if the matter is not resolved as well as a formal step-by-step process which students may use for resolution of an academic concern. Copies of the policy may be obtained from division offices and the Dean of Student Services.

Sexual Harassment

It is the policy of the College of Lake County that no staff member or student shall be subject to sexual harassment. Sexual harassment is a form of sexual discrimination and is intolerable.

Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education.
- Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that individual, or
- Such conduct has the purpose or effect of substantially interfering with an individual's academic or professional performance or creating an intimidating, hostile or offensive education or employment environment.

Any staff member or student engaging in such prohibited activity shall be subject to disciplinary action up to and including termination from this institution, as determined by an administrative or board action.

This policy applies to acts of sexual harassment of any member of one sex against a member of the opposite or the same sex at all levels of the college community—supervisor-subordinate, faculty-student, employee-peer and student-peer.

Any faculty or staff member who experiences sexual harassment is encouraged to contact the Affirmative Action Officer at ext. 2216 or the Dean of Student Services at ext. 2415.

Illinois Clean Air Act: Effective 7-1-90.

The entire main campus is smoke-free except for the designated smoking areas in Lancers Cafeteria and 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 and state-of-the-art adaptive equipment.

Services are provided after meeting with a trained staff member from the Office of Special Needs. Students must complete a Request for Services Form before accommodations are made. All assistance must be supported by appropriate documentation of disability. Additional information can be obtained from the following offices:

Special Needs Office • Office L127 & L128
223-6601, ext. 2474/2721 • 223-0134 - (VOICE/TDD)

It is recommended that students needing accommodations should contact the Office of Special Needs at least two weeks before classes begin so necessary accommodations can be provided. All information will be 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, ext. 2219 and/or the Dean of Student Services, B201, ext. 2415.

Student Activities

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.

Through the Student Activities office, students are provided the opportunity to become involved in campus life, to help bring about positive change, 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, Student Senate, Program Board, student newspaper (*Chronicle*), radio station WCLC, literary magazine (*Willow Review*), Child Care Center, Substance Abuse Prevention Center, and all college commissions. There are also more than 25 special interest clubs. Student Activities provides educational, social, cultural, and recreational opportunities for students, staff and members of the community.

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

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 in at the Student Activities office, Room C101 or call ext. 2287.

Student Governance

Students may impact college-wide policy, procedures or actions affecting student life by directing their concerns to or by participating in the Student Senate and college-wide governance commissions.

Contact the Dean of Student Services, B201, ext. 2415 or the Director of Student Activities, C101, ext. 2287 for assistance in sorting through options and identifying chairpersons.

Student Body Profile

In 1993, 24 percent of the students graduating from Lake County public high schools in the spring entered the College of Lake County in the fall. The student body of over 15,000 is a stimulating mix of recent high school graduates and adults of all ages. The largest segment of the student population at CLC, 40 percent, ranges in age from 17 to 24 years. Predictably, the next largest group is composed of people who are 25 to 34 years old. Of the rest, 20 percent are in the 35-44 year category, nine percent are 45-54, and three percent are 55 and older.

The average student age at the college is 31 and, while the majority were born in the U.S.A., people from 25 different countries take classes here. A very large majority, 82 percent, attend part-time. More of the students, by a slim majority of two percent, are enrolled in classes held during the day.

A recent college survey reveals that when CLC students transfer to a four-year school, they do as well or better than their fellow students. Those who take occupational courses find good jobs they enjoy. A study of 1991-92 CLC graduates indicates that 62 percent of the respondents are working in a field related to their program of study and 74 percent 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 has a commitment to the service personnel and their families at the Great Lakes Naval Base. The college's in-district admission policies apply to all service personnel and their families. For more information on applying for a SOC agreement, contact Arlene Kuhn, Veterans Representative at ext. 3608.

Academic Information and Regulations



The material is arranged alphabetically to form a glossary of essential information. If you wish to have any parts of this chapter clarified, please contact the Counseling Center at ext. 2572 or the Office of Admission at ext. 2573.

Academic Standards

- I. The college expects each student to make satisfactory academic progress toward attaining an expressed educational and/or vocational objective. Satisfactory academic progress is measured in terms of both the number of courses completed and grades earned.

To be in good standing, the college expects each student to satisfy the following minimum standards:

1. Course Completion Standards:

New students must complete and earn passing grades for at least 50 percent of all semester hours attempted during the first semester or session at CLC.

Returning students must complete and earn passing grades for at least 70 percent of all semester hours attempted during any given semester or session at CLC.

2. Grade Average Standard:

Each student must maintain a minimum cumulative grade-point average based on total semester hours attempted at CLC as indicated below:

Semester Hours Attempted	Minimum Cumulative Grade-Point Average
Less than 15	1.00
At least 15 and less than 30	1.50
At least 30 and less than 46	1.75
46 or more	2.00

The course completion standard will initially be applied only to those students enrolled for six or more semester hours. However, any student who does not meet this standard will continue to have the standard applied regardless of the number of semester hours in which they are enrolled.

For the purpose of applying the Course Completion Standard, Semester Hours Attempted includes all semester hours in which the student was enrolled for credit after the end of the fourth week during the fall and spring semesters or after the end of the second week during the summer session.

The **grade average standard** will be applied to all students regardless of the number of semester hours in which they are enrolled.

NOTE: Students who are currently on *Academic Caution* under existing Academic Standards Policy will be considered on *Academic Caution* in the new policy.

- II. Any student previously in good standing who does not meet the academic standards will be placed on *Academic Caution*.

The student will be notified that it is **recommended** that he/she limit his/her semester hours for his/her next semester at CLC and meet with an academic advisor prior to registering. The recommended number of semester hours would be one of the following, whichever provides the most semester hours:

1. The number of semester hours passed during the previous term, or
2. One-half the number of semester hours attempted during the previous term, or
3. One credit course.

- III. Any student on *Academic Caution* who does not meet the academic standards will be placed on *Academic Restriction*.

The student will be notified that he/she is **restricted** to a specified number of semester hours for his/her next semester. The semester hours would be restricted to one of the following, whichever provides the most semester hours:

1. The number of semester hours passed during the previous term, or
2. One-half of the number of semesters hours attempted during the previous term, or
3. One credit course.

The student will also be notified that he/she must meet with an advisor prior to his/her enrollment at CLC.

- IV. Any student on *Academic Restriction* who does not meet the academic standards will continue to be restricted.

- V. Any student placed on *Academic Caution* or *Academic Restriction* who satisfies the academic standards during his/her term at CLC will be considered to be in good standing.

Attendance

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

The college reserves the right to withdraw administratively those students who have no possibility of completing course requirements as established by the instructors.

Auditing

A student is permitted to audit courses in which case he/she will receive a grade of "X" which carries no grade-points or semester hours of credit. 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; completing assignments, exams, and projects is at the discretion of the student. Some type of courses may be deemed inappropriate for audit because they require a high level of student involvement.

Changes in students' enrollment status (audit to credit or credit to audit) must follow the timeframes as listed for refunds in the Tuition and Fee Payment and Refund Schedule (Policy 421). For example, in a course of 12 or more weeks, students may not change enrollment status after the 14th calendar day from the first meeting of the course. See page 21 of this catalog for more information.

Credit-by-Exam

The College of Lake County provides opportunities to earn credit for prior learning experiences. These testing opportunities may be taken for a variety of purposes, e.g., the student's own information, college credit, an employer, a certifying agent, a professional licensing agency. **A student should check the transfer school to determine its policy toward credit-by-examination.**

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 toward satisfying 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 available for receiving credit by exam. For information about specific credit, passing scores and examination requirements, consult one of the following offices:

- Counseling Center, Room C110, ext. 2572.
- Learning Assistance Center, Testing Center, first floor of LRC, ext. 2457.
- Biological/Health Sciences Division, Room C140, ext. 2445.
- Business Division, Room A143, ext. 2515.
- Communication Arts, Humanities & Fine Arts Division, Room B237, ext. 2550.
- Engineering, Mathematics/Physical Science Division, Room B162, ext. 2498.
- Social Science Division, Room A243, ext. 2532.
- Cooperative Education office, Room B201, ext. 2423.

Students who plan to receive credit by examination scores through AP, CLEP and/or DANTES must ask the Educational Testing Service (ETS) to send an official transcript of their scores to the Admission 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 accepts Advanced Placement (AP) for placement into advanced level courses and/or for college credit through tests administered from the College Entrance Examination Board, Advanced Program. High school students can arrange for Advanced Placement tests through their local high school. Specific scores determine placement and/or college credit.

College Level Examination Program (CLEP)

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

The CLEP General Examinations (CLEP-G) are objective tests in five basic areas: English composition, humanities, mathematics, natural sciences, and social sciences/history. CLEP Subject Examinations (CLEP-S) relate to specific college courses.

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 where a student is enrolled for credit recognition.

CLEP tests are offered once a month, except for December, through the Testing Center. CLEP tests are usually offered on the third Monday and Tuesday evenings of each month. The fee is \$47 per test. An additional \$5 is charged if an examinee changes a testing appointment.

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. Appointments for DANTES tests can be made through the Testing Center, first floor of LRC, ext. 3613. The fee is \$47 per test with an additional \$5 charge if an examinee changes the testing date.

Challenge Exams (CH)

With the recommendation of the 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 \$6 per credit hour with a minimum fee of \$18 and a maximum fee of \$36 per course. Students interested in the Challenge Examination process should consult the appropriate division office listed below:

- Biological/Health Sciences Division,
Room C140, ext. 2445
- Business Division, Room A143, ext. 2515
- Communication Arts, Humanities & Fine Arts Division,
Room B237, ext. 2550
- Engineering, Mathematics & Physical Sciences Division,
Room B162, ext. 2498
- Social Science Division, Room A243, ext. 2532
- Cooperative Education, Room B201, ext. 2423

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/her course load according to the number of hours he/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 will be limited for those students on academic restriction.

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/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	
	O	No Grade Received	
	P	Satisfactory	
	R	Repeated	
	W	Withdrew	
	X	Audit	

The "P" and "N" are used only to grade credit-free Community Education courses and designated General Studies credit courses. No General Studies credit grades are calculated in the grade point average.

Academic Honors

A **College Honor List** is compiled and published at the end of the fall and spring semesters. Students who have earned a grade-point average of 3.0 ("B" average) 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.

A student who has earned at least 30 semester hours at CLC by the end of the Fall Semester immediately preceding the commencement ceremony and whose cumulative grade point average at the College is 3.00 or higher will be designated as an honor graduate at the commencement ceremony.

Incompletes

An "I" (Incomplete) may be given to 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. The student, the instructor, and the associate 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 14 weeks 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 14 week 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 associate dean. In this instance go to the appropriate division office.

Independent Study

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

1. For a course appropriate to the student's program of study if the lack of enrollment in that course precludes its being offered as a scheduled class.
2. For documented, extenuating, personal circumstances which preclude an individual's enrollment in a scheduled class appropriate to his/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

Students may repeat courses that are identified 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 limited in the course description.

Students may also re-enroll in courses 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 grades are the same, should be the only grade computed in the student's grade point average. A re-enroll symbol will be added to all those grades that are not computed.

Transfer of Credit

A student who has 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 grade "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.

Educational Guarantees

The College of Lake County provides guarantees for its Associate in Arts degree, Associate in Science degree, Associate in Applied Science degrees, and career certificates. For specific information about educational guarantees, students should contact the Director of Counseling.

Programs of Instruction and Graduation Requirements



Associate Transfer Programs

From CLC's associate transfer programs, students 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 or better than the students who begin at four-year schools.

A five-year longitudinal study of students transferring from two-year colleges to four-year colleges and universities in Illinois reveal that students who transfer with an Associate in Arts or Associate in Science degree earn higher grade-point averages and have higher persistence rates than students who transfer without a transfer degree. Almost 70 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 52 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.

Seven Illinois state universities give special recognition to transfer students who earn an Associate in Arts or Science degree. These transfer students automatically satisfy the lower-division general education requirements of the four-year school and receive full junior standing.

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.

Transfer Degrees — Associate in Arts Associate in Science

The College of Lake County provides both the Associate in Arts and the Associate in Science 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 assure full transfer of coursework, students should work with an advisor who will be able to verify degree requirements for the specific senior college or university of the student's choice.

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 40. These listings are provided as a guide for students. In addition to transfer degree sequences, there are two courses of study presented for engineering students who have specific plans for transfer to either the University of Illinois or Northern Illinois University. In those cases, the sequences represent the course of study which is most efficient for transfer; **they do not, however, lead to the student earning a CLC associate degree.**

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. Requirements for career programs are listed on pages 61-96.

CLC Career Programs

Business Operations

- Accounting
- Computer Operations
- Data Processing Programmer
- Food Service-Culinary Arts
- Food Service-Food Service Management
- Microcomputers for Business
- Office Systems Technology-Word Processing

Business, Sales and Management

- Business Management, Supervision
- Business Management, Marketing
- Business Management, Retailing
- Real Estate

Creative and Applied Arts

- Technical Communications

Health Services and Sciences

- Health Information Technology
- Medical Imaging (Radiography)
- Medical Laboratory Technology
- Medical Transcription
- Nursing (Registered)
- Phlebotomy Technician

Natural Sciences

- Chemical Technology
- Water-Wastewater

Social and Personal Services

- Criminal Justice
- Human Services Program - Adult
- Human Services Program - Exceptional Child
- Human Services Program - Preschool
- Human Services Program - Alcohol, Substance Abuse and Addictive Disorders
- Library/Media Technology

Programs of Instruction and Graduation Requirements

Trades, Crafts and Industries

Auto Body Repair and Painting
Automotive Technology
Building Construction Technology
Computerized Numerical Control Programming
Electrical/Electronics Maintenance
Horticulture
Machine Tool Trades
Mechanical Maintenance/Repair
Refrigeration & Air Conditioning
Tool & Mold Maker
Welding

Technologies

Architectural Technology
Civil Technology
Drafting
Electronic Software Technology
Electronics Engineering Technology
Mechanical Engineering Technology

Joint Agreement Programs

Students interested in joint agreement programs should contact the CLC Office of the Dean of Instruction Transfer/Adult Continuing Education, ext. 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 (708) 697-1000
Elgin, Illinois
Dental Assisting

Gateway Technical College (414) 656-6900
Kenosha, Racine and Elkhorn, Wisconsin
Aeronautics-Pilot Training
Air Frame and Power Plant Mechanic
Barber/Cosmetologist
Computer Information Systems - Microcomputer Specialist
Court and Conference Reporting
Dental Assisting
Electromechanical Technology
Electronic Computer Technology
Farm Business and Production Management
Fluid Power Maintenance
Fluid Power Technician
Health Unit Coordinator
Hotel-Motel Management

Interior Design
Marketing-Fashion Merchandising
Marketing-Industrial
Marketing-Materials Management
Medical Assistant
Practical Nursing
Radio Broadcasting Technician
Surgical Technician
Travel Agent

William Rainey Harper College (708) 397-3000
Palatine, Illinois

Banking and Savings Association Management
Bread and Pastry Arts
Building Codes and Enforcement
Cardiac Exercise Technology
Certified Professional Secretary
Commercial Credit Management
Dental Hygiene
Dietetic Technician
Fashion Design
Fashion Merchandising
Financial Management
Industrial and Retail Security
Interior Design
Interpreter Training
Journalism
Legal Secretary
Legal Technology
Material Management
Medical Office Assistant
Pharmacy Technician
Real Estate (AAS only)
RN Refresher Course - LLH 086
Operating Room Nurse Course - LLH 067

McHenry County College (815) 455-3700
Crystal Lake, Illinois
Habilitation Aide
Industrial Engineering Technology
Industrial Work Measurement
Real Estate Appraisal
Small Business Specialist
Teacher Assisting

Oakton Community College (708) 635-1600
Des Plaines, Illinois
Biomedical Electronics
Certified Professional Secretary
Direct Marketing
Financial Services
Hotel-Motel Management
Materials Management
Physical Therapist Assistant
Real Estate
Real Estate Appraisal

Programs of Instruction and Graduation Requirements

Graduation Requirements for Associate Degrees

Petition for Graduation

All students who intend to receive a degree or certificate must complete a Petition for Graduation. The student must meet the general requirements for associate degrees and must successfully complete the specific General Educational Requirements as defined by CLC's catalog at the time the student first enrolled or by CLC's catalog at the time the student petitions for graduation.

General Requirements for Associate Degrees

- The satisfactory completion of no fewer than 63 semester hours.
- 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/her active duty assignment takes him/her to a base precluding his/her attendance in College of Lake County courses.
- The maintenance of a "C" (2.00) average for all work at CLC used to compute the grade-point average.
- 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:
 - 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.
 - Successful completion of Political Science 121, History 221, or Social Science 111 at CLC.
 - Presentation of an official Illinois high school transcript which clearly gives evidence that this requirement was satisfied for high school graduation.
 - Completion of the requirement at another institution of higher education in the State of Illinois.
- The satisfactory completion of the General Education Requirements for the appropriate degree.

Specific General Education Requirements for Associate Degrees

Broadening an individual's knowledge and understanding of the world has long been an objective of higher education. This objective of a liberal education is embodied in the concept of General Education, a legal and philosophical commitment of the community college movement. Every graduate of an associate degree program at the College of Lake County shall successfully complete a variety of general education requirements. The student generally may select from several courses to meet these requirements.

Following are the specific requirements for the Associate in Arts and Associate in Science degrees. The number of hours required in each category is indicated. Students should closely observe prerequisite requirements for specific courses.

ASSOCIATE IN ARTS DEGREE

Communication Arts - 9 credit hours

ENG 121, ENG 122 OR ENG 126, SPE 121

Humanistic Studies - 9 credit hours

Courses must be taken from at least three departments.

ARC 228	ENG 123	HUM 125	MUS 229
	ENG 129	HUM 126	MUS 243
ART 121	ENG 220	HUM 127	MUS 244
ART 122	ENG 222	HUM 221	MUS 245
ART 124	ENG 223	HUM 222	MUS 246
ART 127	ENG 225	HUM 225	
ART 128	ENG 226		APPLIED
ART 129	ENG 227	JPN 121	MUSIC
ART 221	ENG 228	JPN 122	MUS 160-
ART 222	ENG 229	JPN 221	189
ART 223	ENG 241	JPN 222	MUS 260-
ART 224	ENG 243		288.
ART 225	ENG 244	MUS 120	
ART 226	ENG 249	MUS 121	PHI 121
ART 227		MUS 123	PHI 122
ART 228	FRN 121	MUS 124	PHI 123
ART 229	FRN 122	MUS 127	PHI 125
ART 240	FRN 221	MUS 128	PHI 129
ART 241	FRN 222	MUS 129	
ART 242		MUS 140	SPA 121
ART 243	GER 121	MUS 141	SPA 122
ART 244	GER 122	MUS 143	SPA 221
ART 246	GER 221	MUS 144	SPA 222
ART 247	GER 222	MUS 145	
		MUS 146	SPE 124
CHI 121	HUM 121	MUS 147	SPE 125
CHI 122	HUM 122	MUS 148	SPE 222
CHI 221	HUM 123	MUS 223	
CHI 222	HUM 124	MUS 228	

Mathematics - 3 credit hours

MTH 121 or higher

Programs of Instruction and Graduation Requirements

Sciences - 7 credit hours

Courses must be taken from two different departments.
At least one course must be a laboratory science course.

Lab Science	Other Sciences
BIO 120	BIO 127
BIO 121	
BIO 224	
CHM 120	GEG 121
CHM 121	
GEO 121	GEO 120
	GEO 124
	GEO 126
	GEO 224
PHY 120	
PHY 121	
PHY 123	

FRN 121	HUM 221	MUS 141	PHI 121
FRN 122	HUM 222	MUS 143	PHI 122
FRN 221	HUM 225	MUS 144	PHI 123
FRN 222		MUS 145	PHI 125
	JPN 121	MUS 146	PHI 129
GER 121	JPN 122	MUS 147	
GER 122	JPN 221	MUS 148	SPA 121
GER 221	JPN 222	MUS 223	SPA 122
GER 222		MUS 228	SPA 221
	MUS 120	MUS 229	SPA 222
HUM 121	MUS 121	MUS 243	
HUM 122	MUS 123	MUS 244	SPE 124
HUM 123	MUS 124	MUS 245	SPE 125
HUM 124	MUS 127	MUS 246	SPE 222
HUM 125	MUS 128	APPLIED MUSIC	
HUM 126	MUS 129	MUS 160-189	
HUM 127	MUS 140	MUS 260-288	

Mathematics - 8 credit hours

MTH 122 or higher

Sciences - 8 credit hours

Courses must be taken from two departments.
Both courses must be laboratory science courses.

Lab Science	Other Sciences
BIO 120	BIO 127
BIO 121	
BIO 224	
	GEG 121
CHM 120	
CHM 121	
	GEO 120
GEO 121	GEO 124
	GEO 126
	GEO 224
PHY 120	
PHY 121	
PHY 123	

Social Science - 6 credit hours

Courses must be taken from two disciplines.

ANT 121	PSC 121
ANT 221	PSC 122
	PSC 221
	PSC 222
ECO 221	
ECO 222	PSY 121
GEG 122	
GEG 123	SOC 121
	SOC 222
HST 121	SOC 223
HST 122	SOC 224
HST 123	SOC 225
HST 124	
HST 221	
HST 222	

Humanistic Studies/Social Science/ Communications - 3 credit hours.

An additional three credit hours must be taken from the lists of courses under Humanistic Studies or Social Science or from the following list:
ENG 124, SPE 122, SPE 123, OR SPE 128

General Electives - 23 credit hours

Social Science - 9 credit hours

Courses must be taken from at least three departments.

ANT 121	PSC 121
ANT 221	PSC 122
	PSC 221
	PSC 222
ECO 221	
ECO 222	PSY 121
GEG 122	
GEG 123	SOC 121
	SOC 222
HST 121	SOC 223
HST 122	SOC 224
HST 123	SOC 225
HST 124	
HST 221	
HST 222	

Humanistic Studies/Social Science - 3 credit hours

Three additional credit hours must be taken from the lists of courses under Humanistic Studies or Social Science.

General Electives - 23 hours

ASSOCIATE IN SCIENCE DEGREE

Communication Arts - 9 credit hours

ENG 121, ENG 122 OR ENG 126, SPE 121

Humanistic Studies - 6 credit hours

Courses must be taken from at least two departments.

ARC 228	ART 225	CHI 121	ENG 227
	ART 226	CHI 122	ENG 228
ART 121	ART 227	CHI 221	ENG 229
ART 122	ART 228	CHI 222	ENG 241
ART 124	ART 229		ENG 243
ART 127	ART 240	ENG 123	ENG 244
ART 128	ART 241	ENG 129	ENG 249
ART 129	ART 242	ENG 220	
ART 221	ART 243	ENG 222	
ART 222	ART 244	ENG 223	
ART 223	ART 246	ENG 225	Continued
ART 224	ART 247	ENG 226	In Next
			Column...

Programs of Instruction and Graduation Requirements

Special Notations on Associate in Arts and Associate in Science 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, 7, or 9 courses that have been articulated with three or more public Illinois universities may be used as general electives. For an approved list of articulated courses, contact the Counseling Center, Admission and Records, or division Offices.

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

Humanistic Studies	FRN (Any Course)	SPA (Any Course)	HST 121
	GER (Any Course)		HST 122
ART 240	HUM 121	Social Science	HST 127
ART 241	HUM 122	ANT 121	PSC 221
ART 242	HUM 124	ANT 221	
ENG 228	JPN (Any Course)	ECO 225	Science
ENG 244	PHI 123	GEG 122	BIO 120
CHI (Any Course)	PHI 125	GEG 123	

The course taken to fulfill the international education requirement will count toward the Humanistic Studies, Science, or Social Science general education requirement.

- C. Except for the international 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, PDS 121, and LSC 101 may count as elective credit.
- E. Courses with prefixes of ABE, ESL, GED, OR GS_ will not count toward the degree.
- F. Students must have a grade point average of 2.0 or higher to graduate.
- G. Exceptions will be made on an individual basis to facilitate student transfer or in other special cases. Course substitution forms should be directed to the Dean of Instruction for Transfer and Adult Continuing Education.

Career Programs Degree Requirements Associate in Applied Science

1. Communication Arts.....6
English (ENG 121), Speech (check the requirements of specific programs to determine which English and Speech course you must take)
2. Social Science.....6
Anthropology, Economics, Education, Geography, History, Political Science, Psychology, Social Science, Sociology
3. Science and/or Mathematics.....3
Biology, Business Mathematics (BSS 122), Chemistry, Geography (GEG 121), Geology, Mathematics, Physics
4. Humanistic Studies.....3
Note: Humanities electives must be chosen from list of courses under Humanistic Studies, page 36
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," "3," or "5" (MTH 101).
 - b. Adult Education courses with a department prefix of ABE, ADE, ESL, GED or VST.
 - c. General Studies courses with a department prefix of "GS_" (GSV 038).

6. No courses may be used to satisfy more than one General Education Requirement.
7. Specific electives and total hours vary by program. See program descriptions, pages 61-96.

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 61 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. (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/her active duty assignment takes him/her to a base precluding his/her attendance in 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 Associate Dean of Adult Continuing Education and Extension Services. 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 Adult Continuing Education and Extension Services at ext. 2470 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 Arts/Associate in Science

ACCOUNTING

(Associate in Arts)

Code 13AA

Business Division, Room A142, ext. 2515

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also 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.....	4
		<u>16</u>

Second Semester

ENG 122	English Composition II or	
ENG 126	Advanced Composition.....	3
	MTH Elective.....	3
	Humanistic Studies Elective ¹	3
	Social Science Elective.....	3
	Science Elective (lab) ³	4
		<u>16</u>

Third Semester

ACC 121	Principles of Accounting I.....	4
ECO 221	Principles of Economics I.....	3
DPR 226	Intro. to Business Computer Systems ⁴	3
	Humanistic Studies Elective ¹	3
	MTH Elective.....	3
		<u>16</u>

Fourth Semester

ACC 122	Principles of Accounting II.....	4
ECO 222	Principles of Economics II.....	3
BUS 221	Business Law I.....	3
	Science Elective (non lab) ³	3
	Humanistic Studies Elective.....	3
		<u>16</u>

¹PHI 122 or 125 recommended to fulfill one humanities elective.

²Most schools require either MTH 224 or MTH 145 for which MTH 122 is a prerequisite.

³Two science courses from different departments, one of which must include lab experience. A minimum of 7 hours are required.

⁴Some transfer schools require a computer language course, such as MCS 140 FORTRAN. A few schools now prefer DPR 175.

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
Sharon Grove	A136
Kenneth Stair	A139
Gary Thomas	A134
William Van Hulzen	A134

ANTHROPOLOGY

(Associate in Arts)

Code 13AA

Social Science Division, Room A244, Ext. 2532

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
PHI 121	Introduction to Philosophy.....	3
		<u>16</u>

Associate in Arts/Associate in Science

Second Semester

ART	240	History of Art I.....	3
ENG	122	English Composition II	3
HST	122	History of Western Civilization II	3
MTH	122	College Algebra	4
SOC	121	Introduction to Sociology	3
			16

Third Semester

ANT	221	Cultural Anthropology.....	3
		Science Elective (non-BIO).....	3-4
GEG	122	Cultural Geography.....	3
		Humanistic Studies Elective ¹	3-4
PSY	121	Introduction to Psychology	3
			15-17

Fourth Semester

ANT	224	Introduction to Archaeology.....	3
GEG	123	World Regional Geography.....	3
SPE	121	Fundamentals of Speech.....	3
		Humanistic Studies Electives ¹	3-4
		Electives	5
			17-18

¹At least one year of a foreign language is recommended.

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

Name	Office
Noel Stirrat	A251
Robert Townsend	A254

ART

(Associate in Arts)

Code 13AA

Humanities Division, Room B237, Ext. 2550

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
ART	124	Basic Drawing.....	3
ART	122	Basic Color and Design.....	3
ART	240	History of Art I.....	3
		Lab Science Elective	4
			16

Second Semester

ENG	122	English Composition II	3
ART	123	Color and Design Techniques	3
ART	127	Intermediate Drawing	3
ART	241	Art History II.....	3
		Social Science Elective.....	3
			15

Third Semester

SPE	121	Fundamentals of Speech.....	3
ART	225	Figure Drawing.....	3
ART	242	Art History III.....	3
		Mathematics Elective.....	3
		Social Science Elective.....	3
			15

Fourth Semester

ART	221	Advanced Design.....	3
		Humanistic Studies Elective (non-art)	6
		Science Elective	3
		Social Science Elective.....	3
		Electives	2
			17

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
Reginald Coleman	A239
Nancy Cook	A233
Edmond Kanwischer	L035
Anthony Holmes	L035
Daniel Ziembo	A233

Associate in Arts/Associate in Science

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

(Associate in Science)

Code 11AA

Biological and Health Sciences Division
Room C-140, Ext. 2445

The following courses are *recommended* for students who wish to complete the A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also choose electives only after consulting with an 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
	Humanistic Studies Elective ¹	3
		<u>15</u>

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 Science Elective	3
		<u>18</u>

Third Semester

BIO 222	General Botany	4
CHM 222	Organic Chemistry I	5
MTH 145	Calculus & Analytic Geometry I	5
	Humanistic Studies Elective	3
		<u>17</u>

Fourth Semester

BIO 221	General Zoology	4
CHM 223	Organic Chemistry II	5
SPE 121	Fundamentals of Speech	3
	Social Science Elective	3
	Humanistic Studies or	
	Social Science Elective	3
		<u>18</u>

¹Foreign language requirements vary widely among universities; please refer to the school to which you wish to transfer for specific recommendations.

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	Extension
Jack Cote	C146	2325
Linda Curtis	C145	2882
Scott Hickman	C147	2884
Jerry Hinkley	C145	2322
Richard Killen	C148	2328
Terry Larson	C148	2885
John Mathwig	C144	2324
Richard Meginniss	C147	2326
Cheena Wade	C146	2883

BUSINESS ADMINISTRATION

(Associate in Arts)

Code 13AA

Business Division, Room A142, Ext. 2515

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
PSY 121	Introduction to Psychology	3
BUS 121	Introduction to Business	3
SPE 121	Fundamentals of Speech	3
	Mathematics Elective ²	4
		<u>16</u>

Second Semester

ENG 122	English Composition II or	
ENG 126	Advanced Composition	3
	Mathematics Elective ²	3
	Humanistic Studies Elective ¹	3
	Social Science Elective	3
	Science Elective (lab) ³	4
		<u>16</u>

Associate in Arts/Associate in Science

Third Semester			
ACC	121	Principles of Accounting I	4
ECO	221	Principles of Economics I	3
DPR	226	Intro. to Business Computer Systems ⁴	3
		Humanistic Studies Elective ¹	3
		Mathematics Elective.....	3
			16

Fourth Semester			
ACC	122	Principles of Accounting II	4
ECO	222	Principles of Economics II	3
BUS	221	Business Law I	3
		Science Elective (non-lab) ³	3
		Humanistic Studies Elective ¹	3
			16

¹PHI 122 or 125 recommended to fulfill one humanities elective.

²Most schools require either MTH 224 or MTH 145 for which MTH 122 is a prerequisite.

³Two science courses from different departments, one of which must include lab experience. A minimum of 7 hours are required.

⁴Some transfer schools require a computer language course, such as MCS 140 FORTRAN. A few schools now prefer DPR 175.

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
Richard Cummings	A139
Litsa Press	A137
James Reinemann	A135
Ellen Rubert	A137
James Paradiso	A133
Marvin Weiler	A137

CHEMISTRY

(Associate in Science)

Code IIAA

Biological and Health Sciences, Room C-140, Ext. 2445

The following courses are *recommended* for students who wish to complete the A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.S. degree

must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also 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
		Humanistic Studies Elective ¹	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 ²	4
		Social Science Elective.....	3
		Humanistic Studies Elective.....	3
			18

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

Fourth Semester			
CHM	223	Organic Chemistry II	5
PHY	122	General Physics II	5
		Social Science Elective.....	3
		Humanistic Studies or	
		Social Science Elective.....	3
			16

¹Foreign language requirements vary widely among universities; please refer to the school to which you wish to transfer for specific recommendations.

²A 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	Extension
Bob Brasile	B235	2876
Bob Hamilton	B235	2307
Darryl Johnson	B246	2877
Anne Loeb	B246	2308
Ansley Martin	B234	2875
Roger Weichman	B234	2309

Associate in Arts/Associate in Science

COMPUTER SCIENCE

(Associate in Science)

Engineering, Mathematics and Physical Science Division
Room B162, Ext. 2498

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also 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

MTH 145	Calculus and Analytic Geometry I.....	5
MCS 140	Computer Programming I.....	3
ENG 121	English Composition I.....	3
	Lab Science Elective.....	4
		<u>15</u>

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
	Humanistic Study/ Social Science Elective.....	3
	Lab Science Elective.....	4
		<u>17</u>

Third Semester

MTH 246	Calculus and Analytic Geometry III.....	4
MTH 225	Linear Algebra.....	3
SPE 121	Fundamentals of Speech.....	3
PHI 122	Logic.....	3
	Social Science Elective.....	3
		<u>16</u>

Fourth Semester

MTH 244	Discrete Mathematics.....	3
MCS 240	Introduction to Computer Systems.....	3
	Humanistic Studies Electives.....	6
	Social Science Elective.....	3
		<u>15</u>

Recommended additional courses:

MTH 127	Finite Mathematics I.....	3
MTH 222	Elementary Statistics.....	4

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.

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
James Fryxell	B136
Marvin Johnson	B133
Gary Nepstad	B137
Wing Park	B135
Scott Reed	B136
Richard Wong	B141

ECONOMICS

(Associate in Arts)

Code 13AA

Social Science Division, Room A244, Ext. 2532

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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 Economics I.....	3
ENG 121	English Composition I.....	3
PHI 121	Introduction to Philosophy.....	3
*MTH 122	College Algebra or	
*MTH 123	Trigonometry.....	3-4
	Lab Science.....	4
		<u>16-17</u>

Second Semester

ECO 222	Principles of Economics II.....	3
ENG 122	English Composition II.....	3
**	Humanistic Studies Elective.....	3
*MTH 127	Finite Mathematics or	
*MTH 145	Calculus & Analytic Geometry I.....	3-5
PSC 121	American National Politics.....	3
		<u>15-17</u>

Associate in Arts/Associate in Science

Third Semester

SPE	121	Fundamentals of Speech.....	3
ECO		Elective.....	3
**		Humanistic Studies Elective.....	3-4
		Non-Lab Science.....	3
		Elective.....	3
			15-16

Fourth Semester

		** Humanistic Studies Elective.....	3-4
*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
		General Electives	2
			17-19

*Math requirements vary at 4-year institutions.

**At least one year of a foreign language is recommended.

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

Name	Office
Robert Kerr	A237
Ed Starshak	A252
Dale Warnke	A237

ELEMENTARY EDUCATION

(Associate in Arts)

Code 13AA

Social Sciences Division, Room A244, Ext. 2532

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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 Lab Science Elective.....	4
PSC	121	American National Politics.....	3
PSY	121	Introduction to Psychology	3
		Humanistic Studies Elective ¹	3-4
			16-17

Second Semester

ENG	122	English Composition II	3
GEG	121	Physical Geography	3
MTH	121	Fundamentals of Mathematics I ²	3
		Elective.....	3
		Humanistic Studies Elective ¹	3-4
			15-16

Third Semester

SPE	121	Fundamentals of Speech.....	3
EDU	221	Introduction to Teaching	3
PSY	222	Child Growth and Development	3
		Non-Western History/Culture.....	3
		Humanistic Studies Elective.....	3
			15

Fourth Semester

HST	221	U.S. History to 1876	3
PSY	221	Educational Psychology.....	3
		Humanistic Studies Elective.....	3
		Electives	6
			15

¹ At least one year of a foreign language is recommended.

² Math requirements vary at 4-year institutions.

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

Name	Office
Joan Kerr	A155
John Lumber	A242
Elizabeth Pirman	A153

UNIVERSITY PARALLEL SEQUENCES for Engineering and Engineering Technology

See page 58 for information on Engineering parallel and Engineering Technology parallel sequences.

ENGLISH

(Associate in Arts)

Code 13AA

Humanities Division, Room B237, Ext. 2550

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
		Humanistic Studies Elective (non-ENG) ...	3
		Social Science Elective.....	3
		Math Elective.....	3
**		Foreign Language	4
			16

Associate in Arts/Associate in Science

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 Science Elective.....	3
**	Foreign Language	4
		<hr/> 16

Third Semester

ENG 229	20th Century American Literature or	
ENG 226	Modern English Literature	3
	Humanistic Studies Elective (non-ENG) ...	3
	Lab Science Elective	4
	Social Science Elective.....	3
	Elective.....	3
		<hr/> 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
	Science Elective.....	3
	Humanistic Studies Elective.....	3
	Elective.....	3
		<hr/> 15

**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 members.

Name	Office
Theresa Aguinaldo	L227
Lynne Curtis	B260
Penne Devery	B263
Mary Dunn	B248
Rita Eastburg	L227
Eibhlin Glennon	508
Patrick Gonder	B250
Martin Ley	B261
George Liu	L230
Jim Miles	B247
Jerry Pinkham	B251
Judy Rosenberg	B252
Paulette Roeske	B250
Ted Schaefer	A235
Elizabeth Spatz	B252
Camille Taylor	B260
Jacinta Thomas	L230
Mary Winter	B261

FRENCH

(Associate in Arts)

Code 13AA

Humanities Division, Room B237, Ext. 2550

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

First Semester

FRN 121	Beginning Conversational French I	4
	or FRN 221*	
ENG 121	English Composition I.....	3
	Social Science Elective.....	3
	Humanistic Studies Elective (non-French).....	3
	Elective.....	3
		<hr/> 16

Second Semester

FRN 122	Beginning Conversational French II.....	4
	or FRN 222*	
ENG 122	English Composition II	3
	or ENG 126 Advanced Composition**	
	Social Science Elective.....	3
	Math Elective.....	3
	Humanistic Studies Elective.....	3
		<hr/> 16

Third Semester

FRN 221	Intermediate French I	4
	or FRN 223 French Civilization***	
SPE 121	Fundamentals of Speech.....	3
	Lab Science Elective	4
	Elective.....	3
	Elective.....	2
		<hr/> 16

Fourth Semester

FRN 222	Intermediate French II	4
	or FRN 224 French Civilization II***	
	Social Science Elective.....	3
	Science Elective.....	3
	Elective.....	3
	Elective.....	3
		<hr/> 16

*Students with at least two recent years of successful high school French should enroll in FRN 221-222.

**Students wishing to coordinate French with Business or other technical study should opt for ENG 126.

***Students who have completed the intermediate courses should enroll in FRN 223-224 (French Civilization).



For more information about this course of study, students may contact either the division office listed or Joe Johnson, the French instructor, at B247.

GEOGRAPHY

(Associate in Arts)

Code 13AA

Social Science Division, Room A244, Ext. 532

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
		Humanistic Studies Elective.....	3
MTH	122	College Algebra.....	4
		Science Elective.....	3-4
			16-17

Second Semester

ANT	121	Introduction to Anthropology.....	3
ENG	122	English Composition II.....	3
		Humanistic Studies Elective.....	3
		MTH Elective*.....	3-4
		Lab Science Elective.....	4
			16-17

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
		Humanistic Studies Elective**.....	3-4
			15-16

Fourth Semester

ANT	221	Cultural Anthropology.....	3
GEG	123	World Regional Geography.....	3
HST	122	History of Western Civilization II.....	3
		MTH or Science Elective.....	3-4
		Elective.....	5
			17

*Math requirements vary at 4-year institutions.

**At least one year of a foreign language is recommended.

Students planning to major in geography at a baccalaureat 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
Noel Stirrat	A251

GEOLOGY

(Associate in Science)

Code 11AA

Engineering, Mathematics and Physical Science Division
Room B162, Ext. 2498

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also 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

Associate in Arts/Associate in Science

Second Semester

ENG 126	Advanced Composition; Scientific and Technical Communications	3
	Social Science Elective.....	3
CHM 123	General Chemistry II	5
GEO 122	Historical Geology.....	4
	Humanistic Studies Elective.....	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
	Humanistic Studies Elective.....	3
	Social Science Elective.....	3
		18

Fourth Semester

MTH 246	Calculus and Analytic Geometry III.....	4
PHY 124	Physics for Science and Engineering II	5
	Humanistic Studies Elective.....	3
	Social Science Elective.....	3
	Humanistic/Social Science Elective.....	3
		18

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
Ron Riepe	B141
Doug Sherman	B140

HISTORY

(Associate in Arts)

Code 13AA

Social Science Division, Room A244, Ext. 2532

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
**	Foreign Language or Electives.....	3-4
		15-17

Second Semester

ENG 122	English Composition II	3
HST 122	History of Western Civilization II.....	3
*	Math Elective.....	3-4
SOC 121	Introduction to Sociology or	
ANT 121	Introduction to Anthropology.....	3
**	Foreign Language or Electives.....	3-4
		15-16

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.....	4
	Electives	3-4
		16-17

Fourth Semester

HST 222	U.S. History from 1876.....	3
PHI 121	Introduction to Philosophy	3
GEG 121	Physical Geography	3
ENG 226	Modern English Literature	3
	Electives	5
		17

* Math requirements vary at 4-year institutions.

** At least one year of foreign language is recommended.

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

Name	Office
Gregory Gordon	L229
John Lumber	A242
Liz Pirman	A154

HUMANITIES

(Associate in Arts)

Code 13AA

Humanities Division, Room B237, Ext. 2550

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
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 Science Elective.....	3
	Science Elective.....	3
	Elective.....	5
		<hr/> 17

MATHEMATICS

(Associate in Science)

**Engineering, Mathematics and Physical Science Division
Room B162, Ext. 2498**

Third Semester

SPE 121	Fundamentals of Speech.....	3
ENG 228	World Literature	3
PHI 121	Introduction to Philosophy	3
ART 240	History of Art I.....	3
	Lab Science Elective	4
		<hr/> 16

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

Fourth Semester

ART 241	History of Art II	3
ANT 221	Cultural Anthropology or Social Science Elective.....	3
PHI 123	Philosophy of Religion.....	3
SPE 222	Introduction to Theatre or HUM 126 English Elective	3
		<hr/> 15

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

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
Nancy Cook	A233
Eibhlin Glennon	508
Ken Simonsen	B249



Associate in Arts/Associate in Science

First Semester

MTH 145	Calculus and Analytic Geometry I.....	5
CHM 121	General Chemistry I or	
BIO 121	General Biology I or	
GEO 121	Physical Geology	4
ENG 121	English Composition I.....	3
PHI 122	Logic	3
		<hr/> 15

Second Semester

MTH 146	Calculus and Analytic Geometry II.....	4
MCS 140	Computer Programming I.....	3
ENG 122	English Composition II or ENG 126.....	3
	Social Science Elective.....	3
	Humanistic Studies Elective.....	3
		<hr/> 16

Third Semester

MTH 246	Calculus and Analytic Geometry III.....	4
MTH 225	Linear Algebra	3
PHY 123	Physics for Science & Engineering I.....	5
	Social Science Elective.....	3
		<hr/> 15

Fourth Semester

MTH 227	Ordinary Differential Equations	3
SPE 121	Fundamentals of Speech.....	3
MCS 142	Computer Programming II or	
MTH 244	Discrete Mathematics	3
	Social Science Elective.....	3
	Humanistic Studies Elective.....	3
	Elective.....	2
		<hr/> 17

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 any of the following full-time faculty members.

Name	Office
Donna Carlson	B135
James Fryxell	B136
James Hodge	B139
Tracey Hoy	B139
Marvin Johnson	B133
Gary Nepstad	B137
Wing Park	B135
Scott Reed	B136
David Schaefer	B138
John Thomas	B133
John Wilmot	B138
Richard Wong	B141
Vince Zalapi	B137

MUSIC

(Associate in Arts)

Code 13AA

Humanities Division, Room B237, Ext. 2550

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

Summer Semester

MUS 127	Fundamentals of Music*	2
	Social Science Elective.....	3
		<hr/> 5

First Semester

MUS 128	Theory of Music I**	4
MUS 145	Piano Class I*** or	
MUS 143-144 & 160-189	Applied Music Courses ...	1
MUS 141	Applied Music Voice or	
MUS 143-144 & 160-189	Applied Music Courses ...	1
MUS 120	Vocal Ensembles or	
MUS 123	Wind Ensemble or	
MUS 223	Jazz Ensemble.....	1
MUS 124	Introduction to Music	3
ENG 121	English Composition I.....	3
	Humanistic Studies Elective	
	(non-music)****	3
		<hr/> 16

Second Semester

MUS 129	Theory of Music II	4
MUS 146	Piano Class II or	
MUS 143-144 & 160-189	Applied Music Courses ...	1
MUS 141	Applied Music Voice or	
MUS 143-144 & 160-189	Applied Music Courses ...	1
MUS 120	Vocal Ensembles or	
MUS 123	Wind Ensemble or	
MUS 223	Jazz Ensemble.....	1
ENG 122	English Composition II or	
ENG 126	Advanced Technical Composition	3
	Humanistic Studies Elective	
	(non-music)****	3
	Social Science Elective.....	3
	Humanistic Studies/	
	Social Science Elective.....	3
		<hr/> 19

Associate in Arts/Associate in Science

Third Semester

MUS 228	Theory of Music III.....	4
MUS 245	Piano Class III or	
MUS 143-144 & 160-189	Applied Music Courses ...	1
MUS 141	Applied Music Voice or	
MUS 143-144 & 160-189	Applied Music Courses ...	1
MUS 120	Vocal Ensembles or	
MUS 123	Wind Ensemble or	
MUS 223	Jazz Ensemble.....	1
SPE 121	Fundamentals of Speech.....	3
	Science Elective.....	3
	Social Science Elective.....	3
		16

Fourth Semester

MUS 229	Theory of Music IV.....	4
MUS 246	Piano Class IV or	
MUS 143-144 & 160-189	Applied Music Courses ...	1
MUS 141	Applied Music Voice or	
MUS 143-144 & 160-189	Applied Music Courses ...	1
MUS 120	Vocal Ensembles or	
MUS 123	Wind Ensemble or	
MUS 223	Jazz Ensemble.....	1
MUS 224	Music Literature.....	3
	Science Elective.....	4
	Math Elective.....	3
		17

*Take prior to Fall or concurrently with Theory 128.

May be waived after conference or proficiency exam.

**Offered only in the Fall Semester.

***Piano class sequence is for beginners or those who have not studied for some time.

****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
Tom Hoekstra	522
Bruce Mack	506

PHILOSOPHY

(Associate in Arts)

Code 13AA

Humanities Division, Room B237, Ext. 2550

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
PHI 121	Introduction to Philosophy	3
	Humanistic Studies Elective (non-philosophy).....	3
	Social Science Elective.....	3
	Science Elective.....	4
		16

Second Semester

ENG 122	English Composition II	3
SPE 121	Fundamentals of Speech.....	3
PHI 122	Logic	3
	Social Science Elective.....	3
	Humanistic Studies Elective (non-Philosophy).....	3
		15

Third Semester

PHI 125	Ethics.....	3
MTH 121	Fundamentals of Math I or	
MTH 221	Fundamentals of Math II.....	3
PSY 121	Introduction to Psychology or	
SOC 121	Introduction to Sociology.....	3
	Science Elective	3
	Humanistic Studies Elective.....	3
		15

Fourth Semester

PHI 123	Philosophy of Religion.....	3
ANT 121	Introduction to Anthropology or	
ANT 221	Cultural Anthropology.....	3
	Humanistic Studies Elective.....	6
	General Elective.....	6
		18

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
Steve Infantino	B262
Ken Simonsen	B249
Brian Smith	B262

Associate in Arts/Associate in Science

PHYSICAL EDUCATION

(Associate in Arts)

Code 13AA

Health, Physical Education and Recreation Division,
Building 7, P.E. Center, Ext. 2475

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

In addition, individual four year schools 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 121	Individual Fitness Activity.....	1
PED 140	Contemporary Health Issues (CPR required).....	2
	Coaching Strategies elective.....	2
		17

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
	Humanistic Studies 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
PED 121	Individual Sports elective.....	1
	International Education elective*.....	3
		16

Fourth Semester

PSY 121	Introduction to Psychology.....	3
BIO 120	Environmental Biology.....	4
MTH 121	Fundamentals of Math.....	3
PED 122	Individual Sports elective.....	1
PED 123	Team Sports elective.....	1
	Humanistic Studies elective.....	3
		15

*List of electives on page 38.

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)

Code 11AA

Engineering, Mathematics and Physical Science Division
Room B162, Ext. 2498

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also 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 Science 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
		<hr/> 17

Third Semester

SPE 121	Fundamentals of Speech.....	3
PHY 124	Physics for Science and Engineering II	5
MTH 246	Calculus and Analytic Geometry III.....	4
	Social Science Elective.....	3
	Humanistic Studies Elective.....	3
		<hr/> 18

Fourth Semester

PHY 221	Physics for Science and Engineering III.....	4
MTH 227	Ordinary Differential Equations	3
	Social Science Elective.....	3
	Humanistic Studies Electives	6
		<hr/> 16

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.

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.

Name	Office
John Shelton	B132
Toby Ward	B132

POLITICAL SCIENCE

(Associate in Arts)

Code 13AA

Social Science Division, Room, A244, Ext. 2532

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. Students should also choose electives only after consulting with an advisor. All course prerequisites must be met.

Associate in Arts/Associate in Science

First Semester

ENG 121	English Composition I.....	3
PSC 121	American National Politics.....	3
SPE 121	Fundamentals of Speech.....	3
	Math Elective*.....	3-4
	Electives.....	3
		<u>15-16</u>

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.....	4
GEG 123	World Regional Geography.....	3
		<u>16</u>

Third Semester

SPA 121	Beginning Conversational Spanish I**....	4
PSC 222	United States Foreign Policy.....	3
HST 121	History of Western Civilization I.....	3
	Humanistic Studies Elective.....	3
	Non-lab science course.....	3
	(Not Biology)	
		<u>16</u>

Fourth Semester

SPA 122	Conversational Spanish II**.....	4
HST 122	History of Western Civilization II.....	3
	Humanistic Studies Elective.....	3
PSC 221	Comparative Political Systems	
	Social Science Electives.....	6
		<u>16</u>

*Math requirements vary at 4-year institutions.

**At least one year of a foreign language is recommended.

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

Name	Office
Dan Ryan	A255
Maureen Starshak	A237
John Steinke	A254

PRE-OCCUPATIONAL THERAPY

(Associate in Science)

Code 11AA

Biological and Health Sciences Division

Room C-140, Ext. 2445

The following courses are *recommended* for students who wish to complete the A.S. degree at the College of

Lake County and then transfer to a four-year college or university. All students who complete the A.S. degree must complete the general education requirements listed on page 36 of this catalog. The general requirements for Pre-occupational Therapy programs vary widely from one academic institution to another, as do the baccalaureate degrees conferred. Physics is required for some programs. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer and adjust their course work at CLC accordingly.

First Semester

CHM 121	General Chemistry I.....	5
ENG 121	English Composition I.....	3
PSY 121	Introduction to Psychology.....	3
ANT 221	Cultural Anthropology.....	3
	Humanistic Studies Elective ¹	3
		<u>17</u>

Second Semester

BIO 121	General Biology I.....	4
CHM 123	General Chemistry II.....	5
ENG 122	English Composition II or	
ENG 126	Advanced Composition.....	3
PSY 222	Child Growth and Development.....	3
		<u>15</u>

Third Semester

ART 226	Introduction to Ceramics.....	3
BIO 122	General Biology II.....	5
PSY 223	Abnormal Psychology.....	3
SPE 121	Fundamentals of Speech.....	3
MTH 122	College Algebra.....	4
		<u>17</u>

Fourth Semester

PSY 224	Theories of Personality.....	3
SOC 121	Introduction to Sociology.....	3
BIO 124	Anatomy and Physiology.....	5
MTH 222	Elementary Statistics.....	4
		<u>15</u>

¹Foreign language requirements vary widely among universities. Please refer to the school to which you wish to transfer for specific recommendations.

For more information about this course of study students may contact either the division office listed or the following faculty member.

Name	Office	Extension
Jerry Hinkley	C145	2322

**PRE-DENTISTRY, PRE-MEDICINE,
PRE-PHARMACY, PRE-PHYSICAL
THERAPY or PRE-VETERINARY**

(Associate in Science)

Code 11AA

Biological and Health Sciences Division Room C-140,
Ext. 2445

Please see recommended courses under Biological Sciences or Chemistry. Program requirements can vary widely from one academic institution to another. Students should become familiar as soon as possible with the requirements of the institution to which they plan to transfer. All students who complete the A.S. degree at CLC must meet the general education requirements on page 37 of this catalog. Students should choose electives only after meeting 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	Extension
Pre-Dentistry		
Jane Leicht	B248	2312
Pre-Medicine		
Dick Meginniss	C147	2326
Pre-Pharmacy		
Anne Loeb	B246	2308
Dick Meginniss	C147	2326
Pre-Physical Therapy		
John Mathwig	C144	2324
Pre-Veterinary		
Mike Corn	C139	2445

PSYCHOLOGY

(Associate in Arts)

Code 13AA

Social Science Division, Room A244, Ext. 2532

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the

institution to which 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
**	Foreign Language or Humanistic Studies Elective	3-4
	Elective	3
		<hr/> 16-17

Second Semester

ENG 122	English Composition II	3
BIO 122	General Biology II	4
HST 121	History of Western Civilization I	3
**	Foreign Language or Humanistic Studies Elective	3-4
	Elective	3
		<hr/> 16-17

Third Semester

SPE 121	Fundamentals of Speech	3
PSC 121	American National Politics	3
* MTH 122	College Algebra	4
PSY	Elective	3
	Science Elective (Non-BIO)	3-4
		<hr/> 16-17

Fourth Semester

PHI 121	Introduction to Philosophy	3
HUM 121	Introduction to Humanities	3
PSY	Elective	3
	Electives	6
		<hr/> 15

*Mathematics vary at 4-year institutions.

**At least one year of a foreign language is recommended.

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

Name	Office
Mario Benassi	A253
Joan Kerr	A155
Diane Krumm	A154
Karen Owens	A155
Donna Raymer	A154
James Romaniuk	A251

Associate in Arts/Associate in Science

RECREATION (School and Community Recreation)

Associate in Science)

Code 11AA

Health, Physical Education & Recreation Division,
Building 7, P.E. Center, Ext. 2475

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
MUS 124	Introduction to Music.....	3
GEO 224	Environmental Geology.....	3
PED 128	Introduction to Recreation.....	3
PED 129	Fundamentals of Youth Programming.....	4
		<u>16</u>

Second Semester

ENG 122	English Composition II.....	3
PSY 121	Introduction to Psychology.....	3
PED 148	Recreation Operations.....	3
PED 229	Experience in the Out of Doors.....	3
	Humanistic Studies elective.....	3
		<u>15</u>

Third Semester

SPE 121	Fundamentals of Speech.....	3
BIO 120	Environmental Biology.....	4
PED 228	First Aid (CPR certification required).....	2
PSC 121	American National Politics.....	3
PED 140	Contemporary Health Issues (CPR required).....	2
	International Education elective*.....	3
		<u>17</u>

Fourth Semester

PED 221	Recreation Fieldwork.....	4
SOC 121	Introduction to Sociology.....	3
MTH 121	Fundamentals of Math.....	3
PED 149	Leisure Sports.....	2
	Humanistic Studies elective.....	3
		<u>15</u>

*List of electives on page 38.

For more information on this course of study, students may contact the division office listed.

SOCIOLOGY

(Associate in Arts)

Code 13AA

Social Science Division, Room A244, Ext. 2532

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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 or	
HST 221	U.S. History to 1876.....	3
MTH 127	Finite Mathematics I or MTH 222.....	3
	** Foreign Language or	
PHI 121	Introduction to Philosophy.....	3-4
		<u>15-16</u>

Second Semester

ENG 122	English Composition II.....	3
SOC 222	Social Problems.....	3
ECO 221	Principles of Economics I.....	3
BIO 121	General Biology I.....	4
	** Foreign Language or	
ENG 228	World Literature.....	3-4
		<u>16-17</u>

Associate in Arts/Associate in Science

Third Semester

SPE	121	Fundamentals of Speech.....	3
SOC	223	Deviance.....	3
PSY	121	Introduction to Psychology	3
GEG	121	Physical Geography	3
	**	Foreign Language or	
ENG	229	20th Century American Literature	3-4
			15-16

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
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Bill Anderson	A252
Robert Dawson	A250
James Dorsey	L228
Mike Kuchera	A255
Robert Townsend	A254
Li-hua Yu	L229

Fourth Semester

ANT	121	Introduction to Anthropology or	
ANT	221	Cultural Anthropology.....	3
PSC	121	American National Politics.....	3
	**	Foreign Language or	
		Humanistic Studies Elective.....	3-4
		Electives	8
			17

*Math requirements vary at 4-year institutions.

**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.



Associate in Arts/Associate in Science

SPEECH/THEATRE

(Associate in Arts)

Code 13AA

Humanities Division, Room B237, Ext. 2550

The following courses are *recommended* for students who wish to complete the A.A. or A.S. degree at the College of Lake County and then transfer to a four-year college or university. All students who complete the A.A. or A.S. degree must complete the general education requirements listed on page 36 of this catalog. Students should become familiar as soon as possible with the requirements of the institution to which 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
SPE 121	Fundamentals of Speech.....	3
SPE 125	Principles of Acting or SPE 126.....	3
	Social Science Elective.....	3
	Lab Science Elective	4
		<hr/> 16

Second Semester

ENG 122	English Composition II	3
SPE 225	Acting I or	
SPE 222	Stage Makeup	3
	Science Elective.....	3
	Social Science Elective.....	3
	Elective.....	3
		<hr/> 15

Third Semester

SPE 228	Directing or	
SPE 222	Introduction to Theatre.....	3
ENG 228	World Literature	3
	Math Elective.....	3
	Social Science Elective.....	3
	Elective.....	3
		<hr/> 15

Fourth Semester

SPE 124	Oral Interpretation or	
SPE 129	Theatre Practicum.....	3
ENG 227	Introduction to Shakespeare	3
PHI 121	Introduction to Philosophy	3
HUM 123	Introduction to Film or	
SPE 126	Introduction to Performing Arts.....	3
MUS 121	Voice Class	1
PED	(Dance or Fencing).....	1
		<hr/> 14

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
Nedra Adams	B259
Robert Coscarelli	509
Glen Gertschen	B258
Fred Gifford	B258
Eibhlin Glennon	508
Thomas Mitchell	508

UNIVERSITY PARALLEL SEQUENCES for Engineering and Engineering Technology

Engineering, Mathematics and Physical Science Division,
Room B162, Ext. 2498

The College of Lake County offers course sequences which are designed to parallel the first two years of engineering and engineering technology programs at major universities which are accredited by the Accrediting Board for Engineering and Technology (ABET). The sequences listed below prepare students for programs at the University of Illinois and Northern Illinois University; however, with the help of an advisor programs can be planned for programs at other universities. Engineering students entering CLC are strongly advised to meet with a faculty advisor from the Engineering Department. Students should call 223-6601, extension 498, for an appointment.

Engineering Transfer Sequence

The following course selections are recommended for efficient transfer to the junior year of the University of Illinois. Some variation in course selection may be advisable, depending on the engineering degree program of intended transfer. Students are strongly advised to work with an advisor to plan the appropriate course of study.

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
		<hr/> 16

Associate in Arts/Associate in Science

Second Semester

MTH 146	Calculus and Analytic Geometry II.....	4
CHM 123	General Chemistry II.....	5
MCS 140	Computer Programming I.....	3
PHY 123	Physics for Science and Engineering I.....	5
		17

Summer Session

EGR 222	Engineering Mechanics of Deformable Bodies or	
MTH 225	Introduction to Linear Algebra.....	3
	Humanistic Studies/Social Science Elective.....	3
		6

Third Semester

MTH 246	Calculus and Analytic Geometry III.....	4
PHY 124	Physics for Science and Engineering II.....	5
ENG 122	English Composition II or	
ENG 126	Advanced Composition	3
EGR 221	Statics and Dynamics	5
		17

EGR 221	Offered Spring Only	
EGR 222	Offered Summer Only	
EGR 260	Offered Spring Only	
MCS 142.....	Offered Spring Only	
MTH 224	Offered Spring Only	
MTH 227	Offered Fall and Spring Only	
PHY 123	Offered Fall and Spring Only	
PHY 124	Offered Fall and Spring Only	
PHY 221	Offered Summer Only	

Fourth Semester

MTH 227	Differential Equations.....	3
PHY 221	Physics for Science and Engineering III.....	4
EGR 260	Introduction to Circuit Analysis.....	4
	Humanistic Studies/Social Science Electives	6
		17

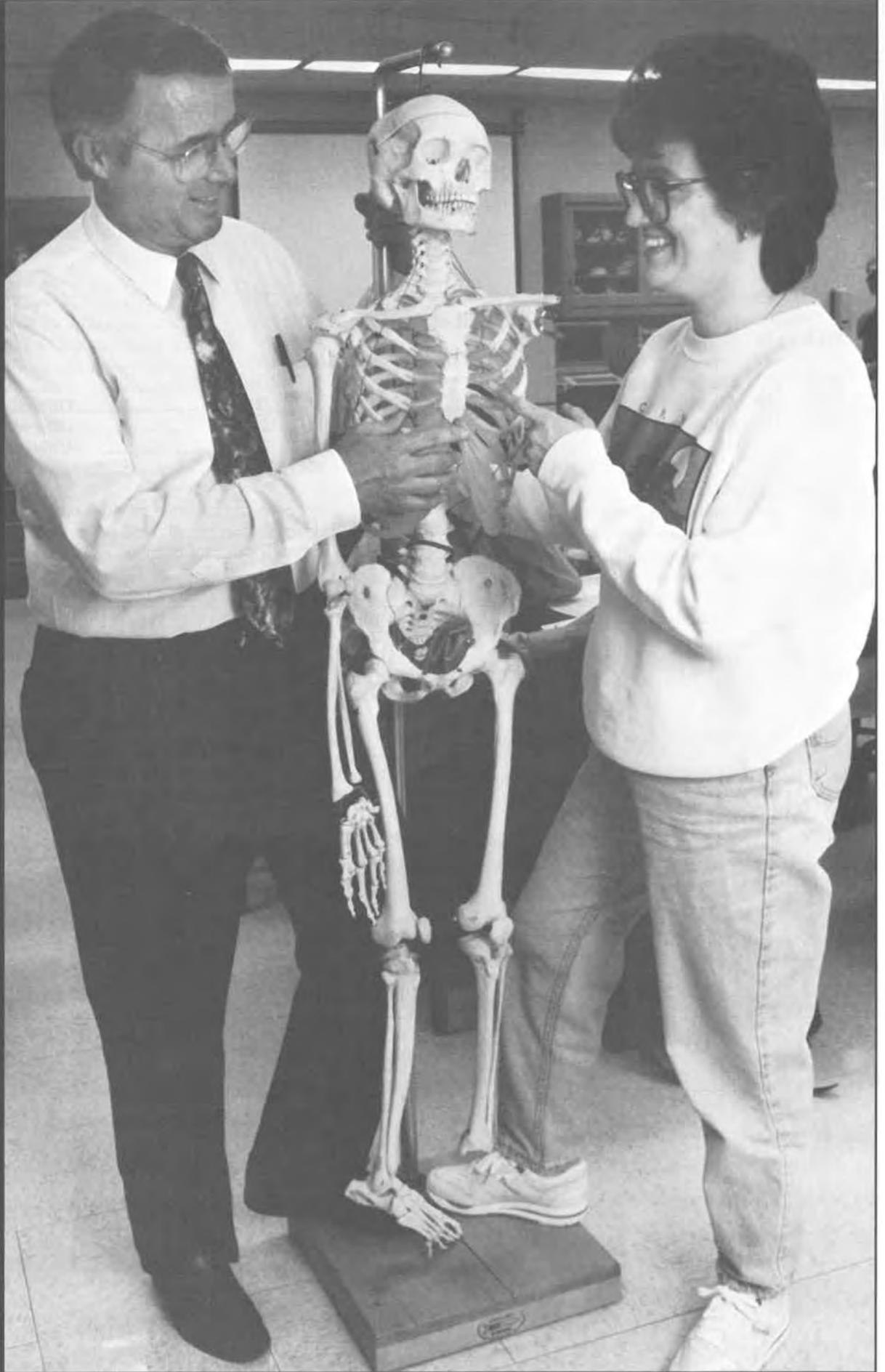
For more information on this course of study students may contact either the division office listed above or one of the following faculty members.

Name	Office
Jack Hudson	B131
Glen Keuss	A236
Jerold Leckman	A234
Ross Lyman	A236
Toby Ward	B132

Students should carefully plan elective options that closely follow the requirements of the particular B.S. degree program where transfer is anticipated.



Associate in Applied Science



ACCOUNTING

(Associate in Applied Science)

Code 22AA

Business Division-room A142, ext. 2515

Students are prepared to compile and analyze business records and prepare financial reports such as income statements, balance sheets, costs studies and reports. Graduates may be employed wherever business, industrial or governmental organizations are located.

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	
BSS 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

Humanistic Studies

	Elective (recommend PHI 122 or PHI 125).....	3
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Math

BSS 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	Principles of Accounting I.....	4
ACC 122	Principles of Accounting II.....	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:

DPR 226	Intro. to Business Computer Systems or	
DPR 175	Business Computer Applications	3
BUS 221	Business Law I.....	3
BUS 121	Introduction to Business.....	3
		9

Business Electives (10 hours)

ACC 114	Payroll Accounting	3
ACC 215	Cost Accounting II	3
ACC 213	Federal Tax Accounting II	3
ACC 270	Advanced Accounting.....	3
ACC 223	Intermediate Accounting III.....	3
ACC 271	Auditing	3
BSS 122	Business Mathematics	3
BUS 222	Business Law II.....	3
MTH 122	College Algebra or higher level math course	3-4
DPR	Electives (DPR 175 recommended).....	1-7
BUS	Electives.....	3-6
BSS	Electives.....	1-4
EWE 220	Cooperative Work Experience I.....	3
	Total	10

MINIMUM HOURS TO COMPLETE A.A.S. 60

Requirements for the Illinois CPA Certificate

To sit for the CPA examination in Illinois, the candidate must be a high school graduate, 18 years old, of good moral character, and meet residency requirements (or their equivalent).

The candidate shall have taken 120 semester hours credit from an institution acceptable to the University of Illinois of which 27 must be in accounting and business law. Up to six hours of business law may be included to satisfy the 27 hour requirement. The remaining hours are to be selected from accounting courses of the candidate's choice.

At CLC it is recommended that these include ACC 121, 122, 212, 214, 221, 222, 223, 270 and 271, BUS 221, 222, DPR 226, and MTH 222. Additional information and application can be obtained from the Committee on Accountancy, University of Illinois, (217) 333-1566.

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, 215, 221, 222, 223 271, BUS 111, 221, 222, 223, DPR 226, ECO 221, 222, 223, MTH 222, 223, and HUM 127. Additional information can be obtained by phoning ICMA, (800) 638-4427.

Associate in Applied Science

Accounting Clerk

(Certificate)

Code 22AF

ACC 112	Accounting Procedures I or	
ACC 121	Principles of Accounting I	3-4
ACC 113	Accounting Procedures II or	
ACC 114	Payroll Accounting or	
ACC 122	Principles of Accounting II or	
ACC 212	Federal Tax Accounting I.....	3-4
BSS 111	Business Communications	3
BSS 122	Business Mathematics	3
BSS 170	Beginning Typing I	2
	DPR Electives	3

Total 17-19

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
Sharon Grove	A136
Kenneth Stair	A139
Gary Thomas	A134
William Van Hulzen	A134

ARCHITECTURAL TECHNOLOGY

(Associate in Applied Science)

Code 24CA

Engineering, Math, Physical Sciences Division - Room B162, ext. 2498

This program prepares students 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, 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 111	Technical Physics or Higher Physics	4
DPR 190	Intro to IBM PC & IBM-PC DOS or	
	CAD 110 CAD-CAM Concepts	1-3
		14-17

Second Semester

ARC 170	Architectural Design	3
CAD 117	Introduction to AutoCAD	3
EGR 115	Applied Mechanics Statics	3
ENG 121	English Composition I	3
MTH 118	Technical Math II or Higher	3-4
		15-16

Third Semester

ARC 171	Architectural Working Drawings	3
CAD 214	Architectural Applications	3
ECO 110	Economics for Business & Industry or	
	ECO 221 Principles of Economic	3
EGR 215	Mechanics of Materials	3
PSY 122	Psychology in Business & Industry	3
SPE 111	or 121 or 122 or 123 or 128	3
		18

Fourth Semester

ARC 216	Architectural Illustrations	3
ARC 228	Architectural History	3
ARC 271	Architectural Working	
	Drawings II	3
BCT 118	Mechanical & Electrical Equipment	3
BCT 119	Specifications & Building Codes	3
	Elective	3
		18

Total Hours 65-69

Select any of the following math sequences: MTH 122 & 123; MTH 145 & MCS 140.

Electives may be chosen from the following with the approval of the advisor:

Electives (3 hours)

ARC 211	Structural Steel Design	3
ARC 214	Reinforced Concrete & Timber Design	3
ARC 215	Architectural Planning	3
ART 122	Basic Color and Design	3
ART 123	Color and Design Techniques	3
ART 124	Basic Drawing	3
BCT 117	Construction Methods	3
BCT 212	Principles of Heavy Construction	3
BCT 213	Construction Law & Documents	3
BCT 214	Construction Estimating	3
CAD 119	Introduction to Intergraph Microstation	3
CAD 177	Site Planning Drafting	3
CAD 217	Auto CAD II	3
CAD 273	Special Topics in CAD	1-3
CIV 111	Surveying I	3
CIV 214	Soils and Foundations	3
EWE 220	Cooperative Work Experience I	1-4
MCS 124	Programming in BASIC Language	2
MCS 140	Computer Programming I	3

Architectural Technology

(Certificate)
Code 24CF

Thirty-four credit hours must be completed for the certificate in Architectural Technology. Courses will generally be selected from the following. Other subjects may be taken 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
BCT 113	Construction Materials I.....	3
BCT 117	Construction Methods.....	3
BCT 118	Mechanical and Electrical Equipment.....	3
BCT 119	Specifications and Building Codes.....	3
BCT 214	Construction Estimating.....	3
CAD 117	Introduction to AutoCAD.....	3
CAD 177	Site Planning Drafting.....	3
CAD 214	Architectural Applications.....	3
CAD 217	Auto CAD II.....	3
CIV 111	Surveying I.....	3
DPR 190	Introduction to IBM PC and PC-DOS.....	1
ENG 121	English Composition I.....	3
MTH 117	Technical Mathematics I.....	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
Douglas Beitel, Coordinator	A234

AUTO BODY REPAIR AND PAINTING

(Certificate)

Code 24AG

Engineering, Math, Physical Science Division
Room B162, ext. 2498.

This program prepares the student for employment in the auto body repair and painting industry. A minimum of 25 credit hours are required for the certificate.

ABR 110	Auto Body I.....	5
ABR 111	Auto Body II.....	5
WLD 170	General Welding or	
WLD 171	Gas Welding, Cutting & Brazing.....	2-3

MTH 114	Applied Mathematics.....	3
AUT 175	Braking Systems.....	5
AUT 176	Suspension and Alignment.....	5

Total Hours 25-26

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

Auto Body Repair and Painting

Name	Office
Jerry Kroll, Coordinator	0206

AUTOMOTIVE TECHNOLOGY

(Associate in Applied Science)

Codes 24AB, 24AC, 24AD

(Certificates)

Codes 24AS, 24AT, 24AU

Engineering, Math, Physical Science Division
Room B162, ext. 2498.

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.

Under Hood Technician

(Certificate & A.A.S. Specialty)

Codes 24AS & 24AB

Completion of these programs prepares the student to diagnose, test, and repair all engine systems.

Phase I

AUT 171	Engine Rebuilding.....	5
AUT 172	Auto Electrical I.....	5
AUT 174	Applied Mechanics (Auto).....	4
MTH 114	Applied Math I.....	3
		17

Phase II

AUT 173	Auto Electrical II.....	5
AUT 215	Automotive Management.....	3
AUT 271	Fuel Systems I.....	5
		13

Associate in Applied Science

Phase III

AUT 272	Fuel Systems II.....	5
AUT 276	Engine Systems Diagnosis.....	5
AUT 275	Air Conditioning & Heating or.....	5
AUT 277	Advanced Specialization or.....	5
EWE 220	Cooperative Work Experience I.....	3-4
		13-15

Total Hours for Certificate 43-45

For A.A.S. degree add the following:

AUT Electives.....	5
*General education courses see below.	
Minimum Total for A.A.S. degree	63

Transmission Technician

(Certificate & A.A.S. Specialty)

Codes 24AT & 24AC

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 174	Applied Mechanics (Auto).....	4
AUT 273	Transmissions I.....	5
MTH 114	Applied Math I.....	3
		22

Phase II

AUT 215	Automotive Management.....	3
AUT 274	Transmissions II.....	5
AUT 277	Advanced Specialization or.....	5
EWE 220	Cooperative Work Experience I.....	3-4
		11-13

Total Hours for Certificate 33-35

For A.A.S. degree add the following:

AUT 175	Braking Systems.....	5
AUT 176	Suspension and Alignment.....	5
AUT	Elective or EWE 220.....	3-4
*General education courses see below.		
Minimum Total for A.A.S. degree		63

Under The Car Technician

(Certificate & A.A.S. Specialty)

Codes 24AU & 24AD

These programs prepare the student for employment in diagnosing, testing, and repairing brakes, suspension and alignment, and driveline systems.

Phase I

AUT 174	Applied Mechanics (Auto).....	4
AUT 175	Braking Systems.....	5
AUT 273	Transmissions I.....	5
MTH 114	Applied Math I.....	3
		17

Phase II

AUT 176	Suspension & Alignment.....	5
AUT 215	Automotive Management.....	3
AUT 277	Advanced Specialization or.....	5
EWE 220	Cooperative Work Experience I.....	3-4
		11-13

Total Hours for Certificate 28-30

For A.A.S. degree add the following:

AUT 171	Engine Rebuilding.....	5
AUT 172	Auto Electrical I.....	5
AUT 274	Transmissions II.....	5
AUT	Elective or EWE 220.....	3-4
*General Education Requirements:		
	Communication Arts.....	6
	Suggestions: ENG 121, SPE 111 or 121	
	Social Science.....	6
	Suggestions: SSC 111, ECO 110,	
	PSY 121, PSY 122, HST 221, PSC 121	
	Humanistic Studies.....	3
		33-34

Minimum Total for A.A.S. degree 63

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
Rod Cummins	1201
Roger Garross	1201
Terry Rawlings, Coordinator	1201 X2908

BUILDING CONSTRUCTION TECHNOLOGY

(Associate in Applied Science)

Code 24BA

Engineering, Math, Physical Science Division - Room B162, ext. 2498.

This program prepares the graduate for employment in the building construction and the building industry.

First Semester

MTH 117	Technical Math I or higher	4
BCT 111	Construction Layout	3
BCT 112	Construction Blueprint Reading	3
BCT 113	Construction Materials	3
ENG 121	English Composition I	3
		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 211	Job Scheduling and Control	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 214	Construction Estimating	3
BCT 215	Construction Management	3
PSY 122	Psychology in Business & Industry	3
	Construction Elective*	3
	Humanistic Studies Elective	3
		18

Total Hours: 64

*Construction Electives:

ARC 121	Architectural Graphics	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
DPR 175	Business Computer Applications	3
EWE 220	Cooperative Work Experience I	1-4
ISB 111	Carpentry I	3
ISB 112	Carpentry II	3
ISB 113	Finishing	2

ISB 115	Masonry I	2
ISB 116	Masonry II	2
ISB 118	Roof Framing	2
ISE 110	Industrial Electricity	2
ISM 114	Plumbing & Pipefitting I	3

*and other technical electives as approved by advisor.

Building Construction Technology

(Certificate)

Code 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 171	Architectural Working Drawings	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
CIV 111	Surveying I	3
CIV 113	Construction Inspection	3
MTH 117	Technical Mathematics I	4
PSY 122	Psychology in Business and Industry	3

Total needed for certificate 22

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

Name	Office
Jerry Leckman, Coordinator	A234

BUSINESS MANAGEMENT

(Associate in Applied Science)

Business Division - room A142, ext. 2515

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, Retailing, and Supervision.

General Education Requirements

Communications:

ENG 121	English Composition I	3
BSS 111	Business Communications or	
ENG 126	Advanced Composition	3

Associate in Applied Science

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

BSS	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	Principles of Accounting I	3-4
BUS	111	Fundamentals of Finance or	
ACC	122	Principles of Accounting II	3-4
BUS	221	Business Law I	3
BUS	223	Principles of Management.....	3
DPR	175	Business Computer Applications or	
DPR	226	Introduction to Business Computer.....	3
		Systems	
			18-20

Specialty Option: Supervision, Marketing or Retailing.....15

Electives: (ACC, BUS, DPR, MCD,
MFG, SPE, EWE 220—4-credit limit)6

Total A.A.S. 60-63

Specialty Options - Marketing (Code 22BC)

BUS	122	Principles of Marketing	3
BUS	212	Industrial Marketing	3
BUS	214	Advertising or	
BUS	217	Marketing Communications	3
BUS	213	Principles of Salesmanship.....	3
BUS	299	Selected Topics in Business or	
BUS	114	Training Principles and Practices.....	3
			15

Specialty Options - Retailing (Code 22BB)

BUS	122	Principles of Marketing	3
BUS	213	Principles of Salesmanship.....	3
BUS	214	Advertising or	
BUS	217	Marketing Communications	3
BUS	224	Principles of Retailing	3
BUS	225	Retail Merchandising.....	3
			15

Specialty Options - Supervision (Code 22BD)

BUS	115	Supervision.....	3
BUS	113	Personnel Administration	3
BUS	114	Training Principles and Practices.....	3
BUS	215	Production and Inventory Control.....	3
BUS	219	Small Business Management.....	3
			15

Retailing Certificate

This program prepares students for positions in retail sales, department management and small store operations management which require retail merchandising and retail management skills and knowledge.

Retailing Code 22BI

BUS	121	Introduction to Business	3
BUS	122	Principles of Marketing	3
BUS	213	Principles of Salesmanship.....	3
BUS	214	Advertising or	
BUS	217	Marketing Communications	3
BUS	223	Principles of Management.....	3
BUS	224	Principles of Retailing	3
BUS	225	Retail Merchandising.....	3
			21

Marketing Certificate

The Marketing certificate prepares students for marketing positions such as sales, promotion, and marketing management.

Marketing Code 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 or	
BUS	217	Marketing Communications	3
BUS	299	Selected Topics in Business or	
BUS	114	Training Principles and Practices.....	3
BUS	223	Principles of Management.....	3
			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 Code 22BK

BUS	115	Supervision.....	3
BUS	121	Introduction to Business	3
BUS	113	Personnel Administration	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
			21

Associate in Applied Science

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
James Paradiso	A238
Litsa Press	A238
James Reinemann	A135
Ellen Rubert	A137
Marvin Weiler	A137

CAD-DRAFTING TECHNOLOGY

(Associate in Applied Science)

Code 24DA, 24DB, 24DC, 24DD, 24DE, 24DG
Engineering, Math, Physical Science Division
Room B162, ext. 2498.

This program provides a solid foundation in the concepts of technical drawing. Skills are developed in the five major fields of Mechanical, Electronic, and Architectural Drafting, plus Survey and CAD systems Operations. Students produce drawings in all types of views using pencil, ink, mechanical lettering devices, including an industrial CAD/CAM system. Graduates typically work in engineering departments as drafters or CAD operators under the supervision of an engineer or designer and can advance to designer, checker or supervisor with additional education and experience.

First Semester

DFT 111	Drafting I.....	5
MTH 115	Applied Math II.....	3
SPE	(SPE 111, 121, 122, 123, or 128).....	3
	Course #1 (See options next column.)....	3

Second Semester

DFT 112	Drafting II.....	5
DFT 113	Technical Illustration.....	3
CAD 112	Introduction to Personal Designer.....	3
	Course #2.....	3
	Course #3.....	3

Third Semester

ENG 121	English Composition I.....	3
CAD 117	Introduction to AutoCAD.....	3
	Course #4.....	3
	Course #5.....	3
	PSC 122, ECO 110/221 or Social Science Elective.....	3

Fourth Semester

CAD 217	AutoCAD II.....	3
	Course #6.....	3
ARC 271	Architectural Working Drawings II or	
CAD 119	Introduction to Intergraph Microstation or	
	Technical Elective.....	3
	ARC 228 or Humanistic Elective.....	3
	PSC 122, ECO 110/221 or Social Science Elective.....	3

Total Hours 61

CAD-DRAFTING OPTIONS: Choose one option from the lists below.

	ARCHITECTURE OPTION 24DB	SURVEY OPTION 24DD
Course #1	ARC 121..... 3 hours	CIV 111..... 3 hours
Course #2	ARC 170..... 3 hours	Elective..... 3 hours
Course #3	ARC 216..... 3 hours	CIV 211..... 3 hours
Course #4	CAD 177..... 3 hours	CAD 177..... 3 hours
Course #5	ARC 171..... 3 hours	Elective..... 3 hours
Course #6	CAD 214..... 3 hours	CIV 213..... 3 hours
TOTALS	61 hours	61 hours

	MECHANICAL OPTION 24DC	ELECTRONIC OPTION 24DE
Course #1	MCD 111..... 3 hours	ELT 111..... 2 hours
Course #2	CAD 110..... 3 hours	ELT 173..... 3 hours
Course #3	ISM 111/215..... 3 hours	ELC 110..... 4 hours
Course #4	CAD 113..... 3 hours	ELT 117/213..... 3/4 hours
Course #5	MCD 214..... 3 hours	CAD 219..... 3 hours
Course #6	CAD 211..... 3 hours	CAD 115..... 3 hours
TOTALS	61 hours	61-62 hours

	SYS. OPNS OPTION 24DG
Course #1	ELT 111..... 2 hours
Course #2	CAD 110..... 3 hours
Course #3	MCD 111..... 3 hours
Course #4	CAD 113..... 3 hours
Course #5	ELT 116..... 3 hours
Course #6	CAD 219..... 3 hours
TOTALS	60 hours

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
Doug Beitel, Coordinator	A234 X2504
Jerry Digilio	AVC 150b
Steve Dulmes	AVC 150d

Associate in Applied Science

CHEMICAL TECHNOLOGY

(Associate in Applied Science)

Code 21CA, 21CB

Biological & Health Sciences Division - Room C-140, ext. 2445.

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 111	Communication II or	
SPE 121	Fundamentals of Speech.....	3
ENG 121	English Composition I.....	3
PSY 121	Introduction to Psychology	3
	Social Science Elective.....	3
	Humanistic Studies Elective.....	3
MTH 118	Technical Mathematics II or	
MTH 122	College Algebra	4
		19

Chemistry Core Courses (required for all students)

CHM 121	General Chemistry I.....	5
CHM 123	General Chemistry II.....	5
CHM 125	Elementary Organic Chemistry.....	5
CHM 221	Analytical Chemistry.....	5
		20

Choose one of the following options:

Chem-Tech Option (21CA)

PHY 111	Technical Physics I or	
PHY 121	General Physics I.....	4-5
PHY 112	Technical Physics II or	
PHY 122	General Physics II.....	4-5
	General Electives	13
		21

Bio-Tech Option (21CB)

BIO 121	General Biology I.....	4
BIO 124	Anatomy and Physiology	5
BIO 125	Introduction to Microbiology.....	4
	General Electives	8
		21
	Total Hours for A.A.S	60

Chemical Technology

(Certificate) Code 21CF

First Semester

CHM 121	General Chemistry I.....	5
ENG 121	English Composition I.....	3
MTH 117	Technical Mathematics I*	4
PSY 121	Intro to Psychology	3
		15

Second Semester

CHM 123	General Chemistry II or	
CHM 125	Elementary Organic Chemistry.....	5
PHY 111	Technical Physics I.....	4
	Electives	6
		15
	Total Hours	30

*Higher math courses may be substituted with the approval of the program coordinator and the associate dean.

Chemical Technology

For more information on this program, students may contact the division office listed or one of the following faculty members:

Name	Office	Extension
Bob Brasile	B235	2876
Bob Hamilton	B235	2307
Darryl Johnson	B246	2877
Anne Loeb	B246	2308
Ansley Martin	B234	2875
Roger Weichman	B234	2309

CIVIL TECHNOLOGY

(Associate in Applied Science)

Code 24VA and 24VB

Engineering, Math, Physical Science Division - room B162, ext. 2498.

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.....	6-8
PHY 111	Technical Physics I or higher.....	4
EGR 121	Engineering Graphics	3
ENG 121	English Composition I or	
ENG 126	Advanced Composition: Scientific and Technical Communications	3
ECO 110	Economics or	
ECO 221	Principles of Economics I.....	3
SPE 111	Communications II or	
SPE 121	Fundamentals of Speech.....	3
EGR 115	Applied Mechanics: Statics	3
CIV 111	Surveying I.....	3
CIV 112	Heavy Construction Methods or	
BCT 212	Principles of Heavy Construction	3
CIV 211	Surveying II	3
CIV 212	Sanitation Systems.....	4
	Humanities and Social Science.....	6
	Technical Electives	6
	Core Total	50-52

Design/Construction Option (Code 24VA)

CIV 213	Subdivision Planning & Design.....	3
CIV 214	Soils and Foundations	3
EGR 215	Mechanics of Materials	3
ARC 211	Structural Steel Design or	
ARC 214	Reinforced Concrete & Timber Design...	3
		12

Environmental Option (Code 24VB)

WWW 114	Introduction to Water/Wastewater Analysis.....	3
WWW 117	Intermediate Water/Wastewater Analysis.....	3
WWW 113	Basic Water Operations and	
WWW 115	Intermediate Water Operations or.....	3
WWW 112	Fundamentals of Wastewater Plant Operation and	
WWW 116	Intermediate Wastewater Plant Operations	3
		12

(Core plus option) Program total 62-64

***General Education Electives:**

One course from each of the following five categories:

- Speech: SPE 111 or SPE 121
- English: ENG 121
- Economics: ECO 110 or ECO 221
- Social Sciences Elective
- Humanistic Studies Elective

Technical Electives:

CIV 113	Construction Inspection	3
CIV 215	Special Problems	3
ARC 110	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 & Electrical Equipment	3
BCT 211	Job Scheduling and Control	3
BCT 213	Construction Law and Documents.....	3
BCT 214	Construction Estimating	3
CAD 117	Introduction to Micro-CAD.....	3
CAD 177	Site Plan Drafting	3
DPR 175	Business Computer Applications	3
MCS 140	Computer Programming I.....	3
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
EWE 220	Cooperative Work Experience I.....	1-4
EGR 122	Descriptive Geometry.....	3

or other technical electives as approved by advisor.

Civil Technology

(Certificate)

Code 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.....	4

Total Hours 26

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

Civil Technology

Name	Office
Jerry Leckman, Coordinator	A234

CNC PROGRAMMING

(Associate in Applied Science)

Code 24NA

Engineering, Math, Physical Science Division - room B162, ext. 2498

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 machine tools and an industrial CAD/CAM system is performed. Advanced placement in the program may be arranged for experienced programmers and machinists. Machine tool courses are approved for apprenticeship training by the United States Department of Labor, Bureau of Apprenticeship Training.

Phase I

ISM 215	Machining Principles (or ISM 111 & 112).....	3
ISM 213	CNC Operations I.....	3
EGR 121	Engineering Graphics	3
ENG 121	English Composition I.....	3
MTH 117	Technical Mathematics I.....	4

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Associate in Applied Science

Phase II

ISM 115	CNC Programming I	3
IST 113	Jig and Fixture Design	3
CAD 112	Introduction to Personal Designer.....	3
ECO 110	Economics for Business and Industry	3
MTH 118	Technical Mathematics II.....	4
		<hr/> 16

Phase III

ISM 118	CNC Programming II.....	3
CAD 113	3D Modeling & Surfacing.....	3
SPE 111	Communications II	3
	Humanistic Studies Elective.....	3
	Technical Elective.....	3
		<hr/> 15

Phase IV

ISM 119	APT Part Programming	3
CAD 118	CAD/CAM Numerical Control	3
ISM 212	CNC Specialization or	
EWE 220	Cooperative Work Experience I.....	4
	Technical Elective.....	3
	Social Science Elective.....	3
		<hr/> 16
	Total Hours	63

Technical Electives:

Approval of technical electives must be obtained from the program advisor.

ISM 214	CNC Operations II.....	2
ELT 116	Technical Programming.....	3
ELT 117	Industrial Digital Electronics I.....	3
ISM 211	Moldmaking I	3
IST 110	Basic 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)

Code 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

ISM 215	Machining Principles or ISM 111 & 112).....	3
ISM 213	CNC Operations I.....	3
EGR 121	Engineering Graphics	3
MTH 117	Technical Mathematics I.....	4
		<hr/> 13

Phase II

ISM 115	CNC Programming I	3
ISM 214	CNC Operations II.....	2
IST 113	Jig and Fixture Design	3
ENG 121	English Composition I.....	3
		<hr/> 11

Phase III

ISM 118	CNC Programming II.....	3
		<hr/> 3
	Total Hours	27

CNC Operations

(Certificate)

Code 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 and conversational controls are available.

Phase I

ISM 110	Machine Trades Blueprint Reading	3
ISM 215	Machining Principles.....	3
ISM 213	CNC Operations I.....	3

Phase II

MTH 114	Applied Mathematics I.....	3
ISM 214	CNC Operations II.....	2
		<hr/> 14
	Total Hours	14

CNC Programming

Name	Office
Jerry Digilio	AVC150d
Don Ruesch, Coordinator	AVC150c

CRIMINAL JUSTICE

(Associate in Applied Science)

Code 25CD, 25CB, 25CC

Social Science Division - room A244, ext. 2532

This program is structured to prepare students for a variety of careers in the criminal justice system at local, state and federal levels, as well as transfer to four-year institutions that offer a bachelor's degree in criminal justice. Students can specialize in a number of areas, including police administration, criminal investigation, juvenile delinquency, community and institutional corrections, and security

Associate in Applied Science

administration. Students pursuing the A.A.S. degree are required to complete general education courses, a basic core of criminal justice studies, and selected coursework from one of three options: law enforcement, corrections, and security administration. Students desiring to transfer to four-year colleges or universities are encouraged to familiarize themselves with the requirements of the program to which they will transfer and select their coursework accordingly. All students are urged to consult with the program coordinator in planning their program of study.

General Education Requirements:

ENG 121	English Composition I.....	3
SPE 111	Communication II or	
SPE 121	Fundamentals of Speech or	
SPE 128	Interviewing Practices.....	3
SOC 121	Introduction to Sociology or	
SSC 111	Contemporary American Problems I.....	3
SOC 222	Social Problems or	
SOC 223	Deviance.....	3
PSC 121	American National Politics.....	3
PSC 122	State and Local Politics.....	3
PSY 121	Introduction to Psychology.....	3
	Humanistic Studies Elective.....	3
	Mathematics or Science Elective.....	3-4
Total		27-28

Criminal Justice Core for all Students

CRJ 110	Introduction to Criminal Justice.....	3
CRJ 111	Introduction to Policing.....	3
CRJ 114	Penology and Corrections.....	3
CRJ 123	Introduction to Criminology.....	3
CRJ 210	Criminal Law.....	3
CRJ 211	Criminal Procedure and Evidence.....	3
CRJ 229	Juvenile Delinquency.....	3
Total		21

Law Enforcement Option (Code 25CD) Select 15 hours

*CRJ 112	Police Administration.....	3
CRJ 118	Introduction to Criminalistics.....	3
CRJ 212	Traffic Administration.....	3
*CRJ 213	Law Enforcement and Community Relations.....	3
CRJ 214	Vice and Drug Control.....	3
CRJ 215	Issues in Criminal Justice.....	3
CRJ 216	Police Supervision.....	3
CRJ 217	Police Defense Techniques.....	2
CRJ 218	Criminal Justice Internship.....	3
*CRJ 219	Principles of Criminal Investigation.....	3
CRJ 220	Independent Research.....	1-3
EWE 220	Cooperative Work Experience I.....	3-4
EWE 270	Cooperative Work Experience II.....	2-3

Corrections Options (Code 25CB) Select 15 hours

*CRJ 117	Community-Based Corrections.....	3
*CRJ 119	Principles of Direct Supervision.....	3
CRJ 215	Issues in Criminal Justice.....	3
CRJ 219	Principles of Criminal Investigation.....	3
*HUX 170	Introduction to Substance Abuse.....	3
HUS 112	Community Social Services.....	3
HUS 113	Group Processes.....	3
CRJ 218	Criminal Justice Internship.....	3
CRJ 220	Independent Research.....	1-3
EWE 220	Cooperative Work Experience I.....	3-4
EWE 270	Cooperative Work Experience II.....	2-3

Security Administration Option (Code 25CC) Select 15 hours

*CRJ 121	Security Administration.....	3
*CRJ 115	Introduction to Security.....	3
CRJ 116	Retail Security and Loss Prevention.....	3
CRJ 118	Introduction to Criminalistics.....	3
*CRJ 219	Principles of Criminal Investigation.....	3
CRJ 214	Vice and Drug Control.....	3
CRJ 215	Issues in Criminal Justice.....	3
BUS 121	Introduction to Business.....	3
CRJ 220	Independent Research.....	1-3
CRJ 218	Criminal Justice Internship.....	3
EWE 220	Cooperative Work Experience I.....	3-4
EWE 270	Cooperative Work Experience II.....	2-3

*required courses

Total Hours for A.A.S. 63

Criminal Justice

(Certificate)

Code 25CF

CRJ 121	Introduction to Criminal Justice.....	3
CRJ 123	Introduction to Criminology.....	3
SOC 121	Introduction to Sociology or	
SSC 111	Contemporary American Problems I.....	3
PSY 121	Introduction to Psychology.....	3
CRJ 210	Criminal Law.....	3
	Approved Electives in Criminal Justice.....	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
Roger Voltz	0313
William Anderson	A252
Thomas Arnold	0314

Associate in Applied Science

DATA PROCESSING

(Associate in Applied Science)

Code 22DA and 22DB

Business Division-room A142, ext. 2515

This program prepares students for a variety of careers in data processing. Students choose one of two areas of study: business data processing programming or microcomputer applications.

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	Introduction to Psychology	3
		Social Science Elective.....	3
		Humanistic Studies Elective (recommended HUM 127, PHI 122, or PHI 125).....	3
MTH	122	College Algebra or higher MTH or	
BSS	122	Business Mathematics	3-4
Total			18-19

Business Courses Required

BUS	121	Introduction to Business.....	3
ACC	112	Accounting Procedures I or	
ACC	121	Principles of Accounting I.....	3-4
ACC	113	Accounting Procedures II or	
ACC	122	Principles of Accounting II or	
BUS	111	Fundamentals of Finance.....	3-4
Total			9-11

Business Data Programming Option (Code 22DA)

This option prepares students for careers as programmers or programmer/analysts of computer systems.

Data Processing Courses Required

DPR	170	Fundamentals for Data Processing.....	4
DPR	113	COBOL I	4
DPR	117	COBOL II	4
DPR	175	Business Computer Application.....	3
DPR	212	Assembly Language or	
DPR	275	Introduction to "C".....	3
DPR	114	Elements of Systems Analysis	3
DPR	214	Operating Systems	3
DPR	272	Teleprocessing.....	3
DPR	276	Database Concepts.....	3
DPR	220	Cooperative Work Experience I or	
		DPR Electives.....	3
Total			33

Total Hours for A.A.S. 60-63

DPR Electives

DPR	118	Computer Operations.....	3
DPR	173	Interactive Programming/BASIC	3
DPR	178	Managing Microcomputer Systems.....	3
DPR	179	Introduction to Local Area Network.....	3
DPR	213	Report Program Generator	3
DPR	215	Advanced RPG II	3
DPR	274	Introduction to "C".....	3
DPR	275	On-Line Programming.....	3
DPR	278	Desktop Publishing.....	2
DPR	299	Selected Topics in Data Processing.....	3

Any of the following 1-hour microcomputer courses: DPR 193, DPR 196, DPR 198, DPR 291, DPR 292, DPR 295, DPR 279, DPR 191, DPR 197, DPR 290

Microcomputer Applications Option (Code 22DB)

This option of the degree prepares students for positions as microcomputer consultants, microcomputer programmers, information center specialists, and end user support specialists.

Data Processing Courses Required

DPR	170	Fundamentals for Data Processing.....	4
DPR	113	COBOL I	4
DPR	175	Business Computer Applications or	
DPR	190	Introduction to DOS and	
DPR	192	Introduction to dBase IV and	
DPR	194	Word Processing for DP Applic. and	
DPR	195	Introduction to Lotus 1-2-3	3-4
DPR	196	Intermediate Lotus 1-2-3	1
DPR	295	Advanced Lotus 1-2-3	1
DPR	193	Programming in dBase IV.....	1
DPR	291	Advanced dBase IV.....	1
DPR	272	Teleprocessing.....	3
DPR	276	Database Concepts.....	3
DPR	173	Interactive Programming/BASIC or	
DPR	274	Introduction to "C".....	3
DPR	114	Elements of Systems Analysis	3
EWE	220	Cooperative Work Experience I or	
		DPR Elective	3
		DPR Electives.....	3
Total			33-34

Total Hours for A.A.S. 60-64

DPR Electives

DPR 299	Selected Topics in Data Processing.....	1-3
DPR 173	Interactive Programming/BASIC or	
DPR 274	Introduction to "C".....	3
DPR 118	Computer Operations.....	3
DPR 117	COBOL II.....	4
DPR 178	Managing Microcomputer Systems.....	3
DPR 212	Assembly Language.....	3
DPR 214	Operating Systems.....	3
DPR 275	On-Line Programming.....	3
DPR 213	Report Program Generator.....	3
DPR 215	Advanced RPG II.....	3
DPR 278	Desktop Publishing.....	2
DPR 179	Introduction to Local Area Network.....	3

Any of the following 1-hour microcomputer courses: DPR 191, DPR 197, DPR 279, DPR 290

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

Data Processing

Name	Office
Roger Anderson	A140
Ruth Bond	A138
Charles Huss	A140
Carol Mason	A136

Computer Operations

(Certificate)
Code 22DF

This program prepares students to operate automatic data processing equipment.

First Semester

ENG 121	English Composition I.....	3
DPR 170	Fundamentals for Data Processing.....	4
BUS 121	Introduction to Business.....	3
ACC 112	Accounting Procedures I or	
ACC 121	Principles of Accounting I.....	3-4
		13-14

Second Semester

DPR 213	Report Program Generator or	
DPR 173	Interactive Programming BASIC.....	3
BSS 170	Beginning Typing.....	2

DPR 118	Computer Operations.....	3
DPR	Elective.....	3
BSS 122	Business Mathematics or	
MTH 121	Fundamentals of Math I.....	3
		14-15

Total Hours 27-29

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

Computer Operations

Name	Office
Roger Anderson	A140
Ruth Bond	A138
Charles Huss	A140
Carol Mason	A136

Microcomputers for Business

(Certificate)
Code 22DG

This program prepares students to utilize information processing technology hardware and software to solve problems and increase efficiency in the workplace. The program emphasizes microcomputer software applications. Through the selection of electives in data processing, office technology, accounting and business management, the student is able to apply these skills to their field of concentration.

Phase One

ACC 121	Principles of Accounting I or	
ACC 112	Accounting Procedures I.....	3-4
BUS 121	Introduction to Business.....	3

Phase Two

DPR 170	Fundamentals of Data Processing or	
DPR 226	Intro. to Business Computer Systems.....	3-4
DPR 175	Business Computer Applications.....	3
	Approved Elective.....	3

Phase Three

DPR 173	Interactive Programming BASIC.....	3
DPR 178	Managing Microcomputer Systems.....	3
DPR 196	Intermediate LOTUS 1 2 3.....	1
DPR 193	Programming in dBASE IV.....	1
	Approved Elective.....	3

Total Hours 26-28

Associate in Applied Science

Electives are to be chosen from the following courses. Students are responsible for meeting the prerequisites for any course in which they enroll.

DPR 278	Desktop Publishing.....	2
DPR 291	Advanced dBASE IV.....	1
DPR 292	Teleprocessing and the PC.....	1
DPR 295	Advanced LOTUS 1 2 3.....	1
DPR 299	Selected Topics in Data Processing.....	1-4
DPR 113	COBOL I.....	4
DPR 114	Elements of Systems Analysis.....	3
DPR 272	Teleprocessing.....	3
BUS 219	Small Business Management.....	3
BUS 223	Principles of Management.....	3
BSS 112	Automated Office Technologies.....	3
BSS 114	Word Processing Equipment.....	1
BSS 115	Word Processing Equipment Applications.....	1
ACC 212	Federal Tax Accounting I.....	3
ACC 214	Cost Accounting I.....	3
ACC 114	Payroll Accounting.....	3
ACC 122	Principles of Accounting II or.....	4
ACC 113	Accounting Procedures II.....	3
BUS 114	Training Principles & Practices.....	3

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
Roger Anderson	A140
Ruth Bond	A138
Charles Huss	A140
Carol Mason	A136

DRAFTING

(Certificate)

Code 24DF

Engineering, Math, Physical Science Division - Room B162, ext. 2498

This program prepares students to work as junior and senior drafters in a variety of area industries from electronics to motor vehicles to drug 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 67.

First Semester

DFT 111	Drafting I.....	5
ELT 111	Electronic Drafting.....	2
MCD 111	Manufacturing Processes.....	3
MTH 115	Applied Math II or higher.....	3
		<hr/>
		13

Second Semester

DFT 112	Drafting II.....	5
DFT 113	Technical Illustration.....	3
ISM 111	Machine Shop I or.....	3
ISM 215	Machining Principles or.....	3
DFT 115	Model Making I.....	2
	Elective.....	2-4
	Elective.....	2-4
		<hr/>
		14-19

Total Hours 27-32

Electives are to be chosen from the following courses with the approval of the advisor:

ARC 121	Architectural Graphics.....	3
CAD 112	Introduction to Personal Designer.....	3
CAD 116	Introduction to Cadkey.....	3
CAD 117	Introduction to AutoCAD.....	3
CAD 177	Site Plan Drafting.....	3
DFT 116	Model Making II.....	2
ENG 121	English Composition I.....	3
EGR 122	Descriptive Geometry.....	3
EWE 220	Cooperative Work Experience I.....	1-4
MCD 112	Basic Metallurgy.....	3
MCD 114	Dimensional Metrology.....	3
MCD 214	Mechanical Design & Drafting.....	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
Doug Beitel, Coordinator	A234

ELECTRONIC SOFTWARE TECHNOLOGY

(Associate in Applied Science)

Code 24EB

Engineering, Math, Physical Science Division - Room B162, ext. 2498.

This program is intended to provide students with a broad-based training in basic science, electronics, and software development as applied to microprocessors. In terms of employment, the graduate should be capable of working with computer engineers or scientists as part of the overall design and development team.

Associate in Applied Science

First Semester

MTH 117	Technical Mathematics I or	
MTH 122	College Algebra.....	4
ELC 110	Applied Electric Circuit Theory.....	4
ELT 116	Technical Programming.....	3
ENG 121	English Composition I.....	3
	Social Science Elective.....	3
		17

Second Semester

MTH 118	Technical Mathematics II or MTH 123...	3-4
ELT 117	Industrial Digital Electronics I.....	3
ELT 175	Microprocessor Programming I.....	3
SPE 111	Communications II or	
SPE 121	Fundamentals of Speech.....	3
ECO 110	Economics for Business & Industry or	
ECO 221	Principles of Economics I.....	3
		15-16

Third Semester

ELT 173	Applied Analog Circuits.....	3
ELT 176	Microprocessor Programming II.....	3
PHY 111	Technical Physics I.....	4
	Programming Language Elective*.....	3
	Humanistic Studies Elective.....	3
		16

Fourth Semester

ELT 172	Applied Communication Systems.....	3
ELT 270	Microprocessor Programming III.....	3
PHY 112	Technical Physics II.....	4
	Programming Language Elective*.....	3
	Technical Elective.....	3
		16

Total Hours 64-65

*Programming Language Elective should typically be selected from the following:

MCS 140 Computer Programming I
MCS 142 Computer Programming II or others as approved by the advisor.

ELECTRONICS ENGINEERING TECHNOLOGY

(Associate in Applied Science)

Code 24EC

Engineering, Math, Physical Science Division - Room B162, ext. 2498.

Students are prepared to work in research, electronic lay out, instrumentation, design, field service, communications and service laboratories.

First Semester

ELT 111	Electronic Drafting.....	2
ELC 111	Electrical Circuits I.....	4
MTH 117	Technical Mathematics I or	
MTH 122	College Algebra.....	4
ELT 116	Technical Programming.....	3
ENG 121	English Composition I.....	3
		16

Second Semester

ELT 213	Introduction to Digital Electronics.....	4
ELC 112	Electrical Circuits II.....	4
MTH 118	Technical Mathematics II or MTH 123...	3-4
SSC 111	Contemporary American Problems I or	
SOC 121	Introduction to Sociology.....	3
	Humanistic Studies Elective.....	3
		17-18

Third Semester

ELT 113	Transistor Electronics.....	4
ELT 216	Microprocessors I.....	3
MTH 211	Technical Mathematics III or.....	3
MTH 145	Calculus & Analytic Geometry I.....	5
PHY 111	Technical Physics I or	
PHY 121	General Physics I.....	4
SPE 111	Communications II or	
SPE 121	Fundamentals of Speech.....	3
		17-19

Fourth Semester

ELT 115	Electronic Laboratory Techniques.....	2
ELT 212	Electronic Communications Systems.....	3
ELT 211	Advanced Solid State Electronics.....	3
ELT 217	Microprocessors II.....	3
PHY 112	Technical Physics II or	
PHY 122	General Physics II.....	4
ECO 110	Economics for Business & Industry or	
ECO 221	Principles of Economics I.....	3
		18

Total Hours 68-71

Electronics Technology

(Certificate)

Code 24EF

MTH 117	Technical Mathematics I.....	4
MTH 118	Technical Mathematics II.....	4
PHY 111	Technical Physics I.....	4
ELC 111	Electrical Circuits I.....	4
ELC 112	Electrical Circuits II.....	4
ELT 111	Electronic Drafting.....	2
ELT 113	Transistor Electronics.....	4
ELT 116	Technical Programming.....	3
ELT 211	Advanced Solid State Electronics.....	4
ELT 213	Introduction to Digital Electronics.....	4

Associate in Applied Science

ELT 214	Microwave Systems and Measurements	3
ELT 216	Microprocessors I	3
ELT 217	Microprocessors II	3
Total Hours		35

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
Tony Gundrum, Coordinator	B131
Jack Hudson	B131
Greg Morris	B140

Electrical/Electronic Maintenance

(Certificate)

Code 24EH

Engineering, Math, Physical Science Division - Room B162, ext. 2498

Students with experience in the field and demonstrating appropriate knowledge may be given advanced standing in the program.

First Semester

ELC 110	Applied Electric Circuit Theory	4
ELT 117	Industrial Digital Electronics I	3
ELC 113	Basic Instrumentation and Shop Practices	2
MTH 114	Applied Mathematics I or MTH 117	3-4
ENG 121	English Composition I	3
Total		15-16

Second Semester

ELT 173	Applied Analog Circuits	3
ELT 172	Applied Communication Systems	3
ELT 171	Industrial Control Systems	3
ELT 118	Industrial Digital Electronics II	3
	Elective	3-4
Total		15-16

Total Hours 30-32

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
Tony Gundrum, Coordinator	B131
Jack Hudson	B131
Greg Morris	B140

FIRE SCIENCE TECHNOLOGY

(Associate in Applied Science)

Code 24FA

Engineering, Math, Physical Science Division - Room B162, ext. 2498.

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 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
	Humanities electives	6
PHY 120	Practical Aspects of Physics (or higher level)	4
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 124 College Algebra & Trigonometry	5
Total General Education		27-30

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

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 214	Fire Prevention Principles 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

FST electives- 18 hrs.
Minimum Hours Required 60

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
William Ballock, Coordinator	B162

FOOD SERVICE

(Associate in Applied Science)
Code 22FB & 22FC
Business Division, room A143, ext. 2515

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 Option (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	3
		<hr/> 14

Second Semester

FSM 170	Principles of Food Preparation II	4
FSM 175	Nutrition	3
DPR 175	Business Computer Applications	3
ACC 112	Accounting Procedures I	3
	Math or Science Elective	3
		<hr/> 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 Elements of Supervision or	
BUS 115	Small Business Management or	
BUS 219	Selected Topics in Food Service	3
FSM 299	Communications Elective (SPE 128 or 121 recommended)	3
		<hr/> 15

Fourth Semester

FSM 271	Food Service Management	4
FSM 273	Food, Beverage, and Labor Control	3
PSY 122	Psychology in Business and Industry	3
	Social Science Elective	3
	Humanistic Studies Elective	3
		<hr/> 16

Degree Option Total 61

Food Service Management

(Certificate)

Code 22FG
Business Division, room A143, ext. 2515

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.

Associate in Applied Science

FSM 110	Introduction to Professional Food Service	3
FSM 111	Principles of Food Preparation.....	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)

Code 22FH

Business Division, room A143, ext. 2515

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

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
Cliff Wener	A135

HEALTH INFORMATION TECHNOLOGY

(Associate in Applied Science)

Code 21HK

Biological & Health Sciences Division - room C-140, ext. 2445

The program is designed to prepare medical record/health information technicians for middle level responsibilities in medical record departments of hospitals and other health facilities. It provides instruction in the art and science of health information. The Health Information Technology program is accredited by the Committee on Allied Health Education and Accreditation (CAHEA), or its successors, in cooperation with AHIMA'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 ART (Accredited Record Technician). HIT 111, HIT 112, HIT 114 and HIT 115 may be taken by any interested student; admission to the program is not required.

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 532 (including other community college districts with which CLC has a Joint Educational Agreement.)

To be considered for admission to the Health Information Technology Program, you must:

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 also submit a copy of your High School Equivalency (GED) Certificate.
- D. Official transcripts of your records from all previous colleges.

2. Schedule an interview with the HIT Coordinator, Denise Anastasio. To make an appointment, please call 223-6601, ext. 2338.

3. Minimum Selection Criteria: Your records must show that you satisfy the following:

- A. High school graduate or the equivalent.
- B. Category I admission requirements.
- C. Demonstrate a typing proficiency of at least 35 words per minute for three minutes with a maximum of three errors.

Screening deadline: First Wednesday in October. If space is available in the program after screening deadline, qualified students will be accepted on a first completed, first admitted basis.

A student must maintain a minimum grade of "C" in each Health Information course to continue in and graduate from the program.

First Semester

ENG 121	English Composition I.....	3
BIO 121	General Biology I.....	4
HIT 111	Medical Terminology	3
HIT 112	Survey of Health Care.....	2
HIT 115	Health Information Systems	4
		<hr/> 16

Second Semester

HIT 113	Ethical/Legal Aspects of Medical Records	3
HIT 114	Medical Transcription.....	2
BIO 124	Anatomy and Physiology	5
	Humanistic Studies Elective.....	3
DPR 175	Business Computer Applications	3
		<hr/> 16

Third Semester

HIT 211	Coding.....	5
HIT 212	Clinical Practice in Health Information I.....	4
HIT 215	Pathophysiology.....	3
	Social Science Elective.....	3
		<hr/> 15

Fourth Semester

HIT 214	Management for the Health Information Technician.....	2
HIT 216	Evaluating & Reporting Health Care Data	4
HIT 213	Clinical Practice in Health Information II.....	4
SPE 121	Fundamentals of Speech or	
SPE 123	Group Discussion or	
SPE 128	Interviewing Practices.....	3
	Social Science Elective.....	3
		<hr/> 16

Total Hours 63

departments (radiology, pathology, etc.) of hospitals and other health facilities. Graduates of this program will understand and use medical terminology, transcribe all types of medical reports with accuracy and speed and handle clerical and telephone duties in a medical record department or a physician's office.

Typing proficiency of at least 35 words per minute for three minutes with a maximum of three errors. If this requirement cannot be satisfied, the student is expected to take BSS 170 Beginning Typing I.

First Semester

BIO 121	General Biology I.....	4
HIT 114	Medical Transcription.....	2
HIT 111	Medical Terminology	3
HIT 112	Survey of Health Care.....	2
HIT 115	Health Information Systems	4
BSS 114	Word Processing Equipment	1
		<hr/> 16

Second Semester

BIO 124	Anatomy and Physiology	5
BSS 172	Proofreading.....	3
BSS 112	Automated Office Technologies.....	3
BSS 115	Word Processing Applications	1
HIT 116	Advanced Medical Transcription	3
		<hr/> 15

Total Hours 31

For more information on these programs students may contact the division office listed or the following faculty members.

Health Information Technology

Name	Office	Extension
Denise Anastasio	C143	2388
Margaret Gallo	C143	2879



Medical Transcription

(Certificate)

Code 21MF

Biological & Health Sciences Division - room C-140, ext. 2445

This program prepares students for employment in medical record departments and special adjunct professional service

Associate in Applied Science

HORTICULTURE

(Associate in Applied Science)

Code 21HA, 21HB, 21HC

Biological & Health Sciences Division, room C-140, ext. 2445

The curriculum is designed to provide a foundation in one of three occupational areas: Floriculture, Landscape Design, or Turf and Landscape Maintenance. 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 111	Communications II or	
SPE 128	Interviewing Practices or	
SPE 121	Fundamentals of Speech.....	3
ENG 121	English Composition I.....	3
	Social Science Electives	
	(ECO 110 recommended).....	6
	Humanistic Studies Elective.....	3
	Math-Science Elective	
	(MTH 114 recommended).....	3
		<u>18</u>

Horticulture Core Courses (required for all 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
		<u>21</u>

Horticulture Program Options

(Choose one of the following options.)

Floriculture Option (21HA)

HRT 172	Interior Plant Maintenance.....	3
HRT 173	Perennial Flowers.....	3
HRT 174	Basic Floral Design.....	3
HRT 210	Greenhouse Crop Production.....	3
HRT	Electives ¹	3
	General Electives.....	6
		<u>21</u>

Landscape Design Option (21HB)

HRT 118	Landscape Graphics.....	3
HRT 213	Landscape Design.....	3
HRT 214	Landscape Construction.....	3
HRT 215	Computer Landscape Design.....	3
HRT	Electives ¹	3
	General Electives.....	6
		<u>21</u>

Turf and Landscape Maintenance Option (21HC)

HRT 110	Grounds Maintenance.....	3
HRT 173	Perennial Flowers.....	3
HRT 176	Small Engine Repair and Maintenance....	3
HRT 211	Introduction to Turfgrasses.....	3
HRT 212	Turf Culture.....	3
HRT	Electives ¹	3
	General Electives.....	3
		<u>21</u>

Total Hours for A.A.S. 60

Arboriculture

(Certificate)

Code 21HG

HRT 110	Grounds Maintenance.....	3
HRT 112	Tree Identification.....	3
HRT 116	Entomology.....	3
HRT 119	Plant Pathology.....	3
HRT 170	Arboriculture.....	3
		<u>15</u>

Total Hours 15

Landscape Maintenance

(Certificate)

Code 21HH

HRT 110	Grounds 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
		<u>15</u>

Total Hours 15

Floral Design

(Certificate)

Code 21HI

HRT 111	Basic Horticulture	3
HRT 172	Interior Plant Maintenance	3
HRT 174	Basic Floral Design	3
HRT 175	Intermediate Floral Design.....	3
HRT 210	Greenhouse Crop Production	3
	Total Hours	15

Interior Landscaping

(Certificate)

Code 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

¹HRT 276 Fieldwork or EWE 220 is required for students without work experience in Horticulture.

For more information on these programs, students may contact the division office listed or the following faculty members.

Name	Office	Extension
Don Lloyd	C144	2881
Mark Zampardo	Horticulture Bldg.	2320

HUMAN SERVICES PROGRAM

(Associate in Applied Science)

Codes 25HA, 25HB, 25HC, 25HD

Social Science Division - Room A244, ext. 2532.

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
	Humanistic Studies Elective.....	3
	Math or Science Elective	3-4
	Total General Requirements	21-22

Human Services Core for all Students

HUS 111	Health and Nutrition.....	3
HUS 113	Group Processes.....	3
HUS 112	Community Social Services	3
HUX 170	Introduction to Substance Abuse	3
HUS 212	Adolescent and Adult Development	3
HUS 118	Professional Helping Skills	3
SOC 224	Sociology of the Family.....	3
	Total	21

Human Services Program Options

Adult Services Option Code 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 117	Behavior Assessment.....	4
*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.....	3
CRJ 117	Community-Based Corrections	3
CRJ 121	Introduction to Criminal Justice.....	3
CRJ 114	Penology and Corrections.....	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

Associate in Applied Science

Alcohol, Substance Abuse, and Addictive Disorders (ASAAD) Option Code 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

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 Code 25HB 22 hours (AAS degree requires 64 hours)

HUS 116	Principles of Foster Care.....	1
HUS 117	Behavior Assessment.....	4
HUS 210	Principles of Residential Care.....	3
*HUS 222	The Exceptional Child.....	3
HUS 217	Creative Activities II	3
*HUS 170	Human Service Practicum I.....	4
*HUS 171	Human Service Practicum II.....	4
HUS 213	Mental Retardation	3
CRJ 229	Juvenile Delinquency.....	3
CRJ 121	Introduction to Criminal Justice.....	3
CRJ 114	Penology & Corrections	3
PSC 122	State and Local Politics.....	3

HUX courses qualify for electives

*Required courses

Preschool Services Option Code 25HA 24 hours (AAS degree requires 66 hours)

HUS 115	Music Activities for Young Children.....	2
*HUS 119	Language Development and Activities for Young Children.....	2
*HUS 211	Principles of Early Childhood Education	3
*HUS 214	Group Care of Infants and Toddlers.....	3
*HUS 222	The Exceptional Child.....	3
*HUS 216	Creative Activities I.....	3
*HUS 170	Human Service Practicum I.....	4
*HUS 171	Human Service Practicum II.....	4
HUS 270	Administration Early Childhood Programs	3
HUS 213	Mental Retardation	3
PSC 122	State and Local Politics.....	3
PSY 221	Educational Psychology.....	3

*Required courses.

Course substitutions for all majors may be made with the approval of the program coordinator.

Human Services Program

(Certificate) Code 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 212	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: Preschool Services; Exceptional Child Services; Adult Services. Substitutions may be made with coordinator or division approval.

9

Total Hours for Certificate 30

See next page for faculty.

Associate in Applied Science

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

Name	Office
Linda Wetherbe, Coordinator	A241 X2536
Carol Huntsinger	L228

Fourth Semester		
LMT 271	Introduction to Reference	3
LMT 273	Library Materials	3
LMT 115	Supervised Field Practicum II.....	4
	Social Science Electives	6
		16

Total Hours 60-61

LIBRARY/MEDIA TECHNOLOGY

(Associate in Applied Science)

Code 23LB

Communication Arts, Humanities & Fine Arts Division - room B237, ext. 2550

Library/Media Technical Assistants work at the paraprofessional or preprofessional level in libraries. They are technically supportive staff members with specific library/media related skills. Course work will provide a broad foundation of knowledge which can apply to technical or public service work in academic, school, public or special libraries.

First Semester

ENG 121	English Composition I.....	3
HST 121	History of Western Civilization I.....	3
LMT 121	Introduction to Library Science	3
LMT 171	Audio-Visual Media and Equipment	3
	Elective (DPR 111 Introduction to Data Processing recommended)	3
		15

Second Semester

ENG 122	English Composition II	3
HST 122	History of Western Civilization II.....	3
LMT 272	Cataloging and Classification.....	3
ART 240	History of Art I or	
HUM 121	Intro. to Humanities I or	
HUM 125	Introduction to Fine Arts or	
MUS 124	Introduction to Music	3
	Elective (Typing recommended)	3
		15

Third Semester

SPE 121	Fundamentals of Speech.....	3
	Mathematics or Science Elective	3-4
PSY 121	Introduction to Psychology	3
LMT 277	Automation for Libraries.....	3
LMT 114	Supervised Field Practicum I.....	2
		14-15

Library/Media Technology

(Certificate)

Code 23LG

ART 122	Basic Color and Design.....	3
ENG 121	English Composition I.....	3
LMT 121	Introduction to Library Science	3
LMT 171	Audio-Visual Media and Equipment	3
LMT 273	Library Materials	3
LMT 277	Automation for Libraries.....	3
LMT 114	Supervised Field Practicum I.....	2
LMT 272	Cataloging and Classification.....	3
LMT 271	Introduction to Reference	3
	Elective (Typing Recommended).....	3
	Elective (DPR 111 Introduction to Data Processing recommended)	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
Norm Sage, Coordinator	L208

MACHINE TOOL TRADES

(Certificates & A.A.S.)

Code 24SM - Machine Tool Trades Certificate

Code 24SR - Tool and Mold Maker Certificate

Code 24MD - A.A.S.

Engineering, Math., Physical Sciences Division - room B162, ext. 2498

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.

Associate in Applied Science

Machine Tool Trades Certificate

		Lec. -Lab.	Sem. Hrs.	Clock Hrs.
ISM	110 Machine Trades Blueprint Reading.....	(3-0)	3	48
ISM	111 Machine Shop I.....	(2-3)	3	80
MTH	114 Applied Math I.....	(3-0)	3	48
ISM	112 Machine Shop II.....	(1-4)	3	80
IST	115 Grinding Technology.....	(2-2)	3	64
MTH	115 Applied Math II.....	(3-0)	3	48
DFT	117 Machine Sketching & Drafting.....	(2-2)	3	64
ISM	115 CNC Programming I.....	(2-2)	3	64
ISM	116 Precision Machining.....	(1-4)	3	80
MCD	112 Basic Metallurgy I.....	(3-0)	3	48
WLD	171 Gas Welding, Cutting & Brazing.....	(2-2)	3	64
MCD	111 Manufacturing Processes.....	(3-0)	3	48
Total for Certificate				36

Tool & Mold Maker Certificate

An advanced certificate in Tool & 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.

IST	110 Basic Die Making.....	(3-0)	3	48
IST	111 Die Design.....	(2-2)	3	64
IST	113 Jig & Fixture Design.....	(2-2)	3	64
ISM	211 Moldmaking.....	(3-0)	3	48
EWE	220 Cooperative Work Experience I (optional).....		3	
				12-15
				+36
Total for Advanced Certificate				48-51

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	121 English Composition I.....	3
SPE	111 Communications II.....	3
ECO	110 Economics for Business & Industry.....	3
	Social Science Elective.....	3
	Humanistic Studies Elective.....	3
		15
Total hours for A.A.S. Degree		63-66

*Refer to general education requirements for career programs on page 36.

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 Don Ruesch, Coordinator
Office AVC 150c

MECHANICAL ENGINEERING TECHNOLOGY

(Associate in Applied Science)

Code 24MB

Engineering, Math, Physical Science Division - room B162, ext. 2498

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	121 English Composition I.....	3
MCD	111 Manufacturing Processes.....	3
MTH	117 Technical Math I or	
MTH	122 College Algebra.....	4
PHY	111 Technical Physics I or	
PHY	121 General Physics I.....	4
		17

Second Semester

CAD	112 Introduction to Personal Desinger or	
CAD	117 Introduction to AutoCAD.....	3
EGR	115 Applied Mechanics: Statics.....	3
EGR	122 Descriptive Geometry.....	3
MTH	118 Technical Math II or	4
MTH	123 Trigonometry.....	3
SPE	121 Fundamentals of Speech or	
SPE	111 Communications II.....	3
		15-16

Third Semester

EGR	215 Mechanics of Materials.....	3
ECO	221 Principles of Economics I or	
ECO	110 Economics for Business and Industry.....	3
MCD	214 Mechanical Design & Drafting.....	3
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
PHY	112 Technical Physics II or	
PHY	122 General Physics II.....	4
	Technical Electives*.....	3
	Humanistic Studies Elective.....	3
		19

Total Hours 69-70

***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, or other technical courses. Students may obtain technical elective approval from the program coordinator.

Mechanical Engineering Technology - CAD Option

(Associate in Applied Science)

Code 24MQ

Engineering, Math., Physical Sciences Division - room B162, ext. 2498

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 (Code 24MB). Any two courses, totaling 6 credit hours, may be selected from the following group:

CAD 112	Introduction to Personal Designer or	
CAD 117	Introduction to AutoCAD.....	3
CAD 113	3-D Modeling & Surfacing	3
CAD 115	CAD Electrical Schematic and Printed Circuit Design	3
CAD 116	Introduction to CADKEY.....	3
CAD 118	CAD/CAM Numerical Control	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	Special Topics in CAD (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)

Code 24MF

MTH 117	Technical Math I.....	4
PHY 111	Technical Physics I or	
PHY 121	General Physics I.....	4
EGR 121	Engineering Graphics	3
EGR 122	Descriptive Geometry.....	3
CAD 112	Introduction to Personal Designer or	
CAD 117	Introduction to AutoCAD.....	3
MCD 111	Manufacturing Processes	3
MCD 212	Mechanisms	4
MCD 214	Mechanical Design & Drafting.....	3
	Technical Electives	5
	Total Hours	32

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
Glenn Keuss, Coordinator	A236
Ross Lyman	A236

MECHANICAL MAINTENANCE/REPAIR

(Certificate & A.A.S.)

Code 24SI - Certificate

Code 24ME - A.A.S.

Engineering, Math., Physical Science Division - room B162, ext. 2498

This program prepares students for employment and advancement in the mechanical maintenance and machine repair related occupations.

Core Courses: To be taken by all students wishing to obtain a certificate or A.A.S. Degree in this program.

		Lec.	Sem.	Clock
		-Lab.	Hrs.	Hrs.
ISE 110	Industrial Electricity	(1-2)	2	48
ISM 110	Machine Trades Blueprint Reading	(3-0)	3	48
ISM 111	Machine Shop I.....	(2-3)	3	80
MTH 114	Applied Math I.....	(3-0)	3	48
MCD 111	Manufacturing Processes.....	(3-0)	3	48
ISM 117	Machine Components & Repair	(2-2)	3	64
MCD 112	Basic Metallurgy I.....	(3-0)	3	48
FLU 110	Pneumatic Power Systems	(2-2)	3	64
FLU 111	Hydraulic Power Systems	(2-2)	3	64
WLD 170	General Welding.....	(1-2)	2	48
WLD 171	Gas Welding, Cutting & Brazing.....	(2-2)	3	64
ISM 114	Plumbing and Pipefitting I.....	(2-2)	3	
ISM 210	Pump Overhaul and Repair.....	(2-2)	3	
DFT 117	Machine Sketching & Drafting..	(2-2)	3	
	Total Hours for Certificate		40	

In addition to the preceding, all students wishing to obtain an A.A.S. Degree must complete the following courses.

		Lec.	Sem.	Clock
		-Lab.	Hrs.	Hrs.
Technical				
MTH 115	Applied Math II.....	(3-0)	3	48
PHY 120	Practical Aspects of Physics.....	(3-2)	4	80
			7	

General Education Courses*

ENG 121	English Composition I.....	3
SPE 111	Communications II	3
ECO 110	Economics for Business & Industry	3
	Social Science Elective.....	3
	Humanistic Studies Elective.....	3
	Total Hours	15
	Total Hours for A.A.S. Degree	62

*Refer to general education requirements for career programs on page 36.

Associate in Applied Science

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

Mechanical Maintenance/Repair

Name	Office
Jerry Digilio, Coordinator	AVC 150b

MEDICAL IMAGING

(Associate in Applied Science)

Code 21MI

Biological & Health Sciences Division - room C-140,
ext. 2445

The Medical Imaging Program prepares radiographers to work in medical facilities producing radiographic examinations which are interpreted by a radiologist or another medical specialist. This program is accredited by the Joint Review Committee on Education in Radiologic Technology. Graduates of the program are qualified to take the national certification examination given by the American Registry of Radiologic Technologists.

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 from the last high school you attended, sent directly to CLC by the high school. If you did not or will not graduate from high school, you must also 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 223-6601, ext. 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 equivalent.
- B. Category I admission status.
- 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 equivalent course from another accredited college with a grade of "C" or better.
- E. Credit for one year of high school physics or chemistry with a grade of "C" or better
OR completion of CHM 120, CHM 121, PHY 111, or PHY 121 at CLC with a grade of "C" or better,
OR 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 can be obtained from the coordinator.**

Screening Deadline: Third Wednesday in May. 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 I..	5
MIM 112	Principles of Radiographic Exposure.....	3
BIO 124	Anatomy and Physiology	5
		16

First Spring Semester

MIM 113	Radiographic Anatomy & Positioning II....	5
MIM 114	Clinical Practice I.....	3
ENG 121	English Composition I.....	3
PSY 121	Introduction to Psychology	3
		14

Summer Session

MIM 115	Clinical Practice II.....	3
MIM 116	Advanced Radiographic Procedures.....	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	111	Communications II or	
SPE	128	Interviewing Practices or	
SPE	121	Fundamentals of Speech.....	3
			16
Second Spring Semester			
MIM	214	Advanced Topics in Radiography.....	6
MIM	215	Clinical Practice IV	3
MIM	216	Computed Imaging	2
		Social Science Elective.....	3
		Humanistic Studies Elective.....	3
			17
Total Hours			67

For more information on this program students may contact the division office listed or one of the following faculty members.

Medical Imaging

Name	Office	Extension
Judy Baron	B226	2880
Tom Vogl	B226	2313

MEDICAL LABORATORY TECHNOLOGY

(Associate in Applied Science)

Code 21MA

Biological & Health Sciences Division - room C-140, ext. 2445

A two-year program designed to prepare technicians for middle level responsibilities 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.

Interested students may take MLT 110 prior to being admitted to the program. However, the number of students that can be admitted to the next course in the sequence (MLT 111) is limited for any given semester. Therefore, a screening procedure is used to select the academically best qualified from those who request consideration.

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 also 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, Jane Leicht. To make an appointment, please call 223-6601, ext. 2312.
- 3. Minimum Selection Criteria:** Your records must show that you satisfy the following:
- A. High School graduate or the equivalent.
 - B. Category I admission requirements.
 - C. Credit for two years of high school algebra 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.

First Semester

CHM	121	General Chemistry I.....	5
MLT	110	Introduction to Medical Laboratory Technology.....	3
MLT	111	Immunology & Immunoematology.....	6
MTH	122	College Algebra.....	4
			18

Second Semester

BIO	121	General Biology I.....	4
CHM	123	General Chemistry II.....	5
ENG	121	English Composition I.....	3
MLT	112	Hematology and Coagulation.....	6
			18

Associate in Applied Science

Summer Session		
BIO 125	Introduction to Microbiology	4
	Humanistic Studies Elective.....	3
		7
Third Semester		
BIO 124	Anatomy and Physiology	5
MLT 210	Clinical Chemistry	4
MLT 213	Clinical Microbiology.....	4
	Social Science Elective (PSY 121 recommended)	3
		16
Fourth Semester		
MLT 212	Advanced Medical Laboratory Technology.....	8
SPE 121	Fundamentals of Speech or	
SPE 128	Interviewing Practices.....	3
	Social Science Elective.....	3
		14
	Total Hours	73

Phlebotomy

(Certificate)

Code 21MP

This certificate prepares students for employment as phlebotomists in hospitals, clinics, or blood banks. Students will develop skills in performing phlebotomy procedures in various health care settings. The phlebotomy techniques course includes a 3 week practicum during which students must spend 8 hours per day, five days per week (120 hours) at a clinical site. Only day shift hours are currently available for practicum assignments.

This program is accredited by the National Accrediting Agency of Laboratory Sciences.

Certificate Requirements:

To receive the Phlebotomy Certificate, a student must be at least 18 years old, a high school graduate or equivalent, and receive a minimum grade of "C" in the following MLT courses:

MLT 110	Introduction to Medical Laboratory Technology.....	3
MLT 115	Phlebotomy Techniques.....	3
	Total Hours for Certificate	6

For more information on these programs students may contact the division office listed or one of the following faculty members.

Name	Office	Extension
Jane Leicht	B248	2312
Reme Tesch	B248	2878

NURSING

See Registered Nursing on page 92.

OFFICE SYSTEMS AND TECHNOLOGY

(Associate in Applied Science)

Code 22SC

Business Division room A142, ext. 2515

The Office Systems and Technology program provides a blend of office automation skills including word processing and related computer applications for entry level and career advancement. In addition, students establish essential skills in business communication and general business skills and practices.

First Semester

BSS 112	Automated Office Technologies	3
BSS 128	Intermediate Typing	4
BSS 172	Proofreading.....	3
BSS 122	Business Mathematics	3
BUS 121	Introduction to Business	3
		16

Second Semester

BSS 111	Business Communications	3
BSS 223	Advanced Typing	4
BSS 119	Records Management	2
BSS 114	Word Processing Equipment.....	1
BSS 115	Word Processing Equipment Applications	1
DPR 175	Business Computer Applications or	
DPR 190	Introduction to DOS and	
DPR 192	Introduction to dBASE and	
DPR 195	Introduction to LOTUS-1-2-3	3
	OST Electives	2
		16

Third Semester

BSS 117	Machine Transcription.....	2
ACC 112	Accounting Procedures I	3
BSS 116	Advanced Word Processing Equipment Applications	1
ENG 121	English Composition I.....	3
SPE 111	Communication II or	
SPE 128	Interviewing Practices or	
SPE 121	Fundamentals of Speech.....	3
	OST Electives	3
		15

Fourth Semester

ECO 110	Economics for Business and Industry.....	3
PSY 122	Psychology in Business and Industry	3
	Humanistic Studies Elective.....	3
	OST Electives	6
		15

Total Hours 62

Elective Courses

BSS	114	Word Processing Equipment	1
BSS	115	Word Processing Equipment Applications	1
BSS	116	Advanced Word Processing Equipment Applications	1
BSS	118	Graphics and Desktop Publishing	1
BSS	123	Beginning Shorthand or	
BSS	177	Speedwriting	3
BSS	124	Intermediate Shorthand or	
BSS	178	Intermediate Speedwriting	3
BSS	173	Beginning Electronic Calculator	1
BSS	174	Advanced Electronic Calculator	1
BSS	299	Selected Topics in Office Automation.....	1-3
HIT	111	Medical Terminology	3
		BUS Electives	1-6
		DPR Electives	1-3
		EWE	2-6

Other electives may be chosen with consent of an OST Advisor

Word Processing

(Certificate)
Code 22SG

The Word Processing certificate prepares individuals for entry level positions in the office with such titles as general office, secretary, and word processor. This program emphasizes word processing and related office skills for entry level and career advancement.

Required Courses

BSS	112	Automated Office Technologies.....	3
BSS	128	Intermediate Typing.....	4
BSS	114	Word Processing Equipment	1
BSS	115	Word Processing Equipment Applications	1
BSS	111	Business Communications.....	3
BSS	172	Proofreading.....	3
BSS	117	Machine Transcription.....	2
BSS	119	Records Management	2
DPR	175	Business Computer Applications or	
DPR	190	Introduction to DOS and	
DPR	192	Introduction to dBASE and	
DPR	195	Introduction to LOTUS-1-2-3	3
		Electives	8
			30



Elective Courses

BSS	116	Advanced Word Processing Equipment Applications	1
BSS	118	Graphics and Desktop Publishing	1
BSS	122	Business Mathematics	3
BSS	123	Beginning Shorthand or	
BSS	177	Beginning Speedwriting	3
BSS	124	Intermediate Shorthand or	
BSS	178	Intermediate Speedwriting	3
BSS	173	Beginning Electronic Calculator	1
BSS	174	Advanced Electronic Calculator	1
BSS	223	Advanced Typing.....	4
ACC	112	Accounting Procedures	3
BSS	299	Selected Topics in Office Automation.....	1-3
HIT	111	Medical Termonology.....	3
PSY	122	Psychology in Business and Industry	3
		BUS Electives	1-3
		DPR Electives	1-3
		EWE Educational Work Experience.....	1-4

Other electives may be chosen with consent of an OST Advisor

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

Office Systems and Technology

Name	Office
Thomas Lombard	A138
Lauren LoPresti	A133
Lynn Steffen	A133

RADIOGRAPHY

See Medical Imaging on page 86.

Associate in Applied Science

REAL ESTATE

(Certificate)

Code 22RF

Business Division - room A142, ext. 2515

The College of Lake County is certified by the Department of Professional Regulation under the Illinois Real Estate Brokers and Sales License Action of 1983.

A student must meet all requirements under the Act to be able to file to take the Salesperson's or the Broker's Examination given by the State of Illinois.

Salesperson Requirements

RLE 110 fulfills the required salesperson pre-licensing exam course requirement. Mandatory attendance at 30 class hours and a passing score of 70 percent or better on a final exam are required by the Illinois State Department of Professional Regulation.

In addition to meeting the course requirement (RLE 110), an applicant for the State of Illinois licensing examination must be a high school graduate and 21 years of age, OR 18 years of age or older and have at least two years of college course work with a real estate minor.

Broker Requirements

The broker education requirements are successful completion of RLE 112, RLE 215, and any two of the following courses: RLE 210, RLE 211, RLE 212, RLE 213, RLE 214. In addition to meeting course requirements, the broker applicant must have one year of active salesperson experience during the past three years. Course work and experience requirements can be fulfilled simultaneously. A Bachelor Degree with a Real Estate minor will meet some course requirements.

Pre-licensing Review

RLE 215 Advanced Real Estate Principles and Review now fulfills simultaneously any of the three student needs. The course will meet the state mandatory requirement for the broker's pre-licensing education; meet the 15-hour review requirement for 3-5 year inactive licenses; and/or a pre-licensing review seminar for either the salesperson or broker candidate.

Licensing Examination

Further information pertaining to the registration process for the licensing exam may be obtained by calling 1-800-274-0999.

Continuing Education for Salespersons and Brokers

Successful completion of RLE 299-CURRENT TOPICS IN REAL ESTATE will satisfy all requirements needed to renew a salesperson's or broker's license. Licensees receiving an original license within the last year of the renewal period are exempt. This course can be repeated to meet pre-renewal requirements of subsequent years.

RLE 110 - Real Estate Transactions & Math

Successful completion of this course is valid for purposes of determining eligibility to sit for the State license exam for 5 years under the current act.

Real Estate

(Certificate)

Code 22RF

This certificate is designed for students who intend to fulfill as a minimum the educational requirements to sit for the broker's level licensing examination as established by the Illinois Department of Professional Regulation.

Required Courses:

RLE 110	Real Estate Transactions and Mathematics	3
RLE 215	Advanced Real Estate Principles & Review	1
RLE 299	Current Topics in Real Estate	1
RLE 112	Contracts & Conveyances	2
	Total	7

Electives:(choose any two courses)

RLE 210	Real Estate Investing	2
RLE 211	Real Estate Finance	2
RLE 212	Real Property Management	2
RLE 213	Brokerage and Sales	2
RLE 214	Real Estate Appraisals	2

Total Hours 11

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

Real Estate

Name	Office
Don Holland	A142

REFRIGERATION & AIR CONDITIONING

(Associate in Applied Science)

Code 24RA

Engineering, Math, Physical Sciences Division - room B162, ext. 2498

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.

First Semester

RAC 110	Theory of Refrigeration.....	5
RAC 174	Applied Electricity.....	4
MTH 115	Applied Mathematics II.....	3
ENG 121	English Composition I.....	3
		15

Second Semester

RAC 113	Commercial Refrigeration Systems	4
RAC 119	Electric Motors & Controls.....	5
	Social Science Elective.....	3
RAC 112	Residential AC Systems.....	4
		16

Third Semester

RAC 118	Residential Heating Systems.....	4
RAC 114	Commercial AC Systems	4
	Technical Elective ¹	2-4
PHY 111	Technical Physics I.....	4
		14-16

Fourth Semester

RAC 173	Air Movement & Ventilation.....	4
SPE 111	Communications II	3
RAC 117	Installation & Service Problems.....	4
	Humanistic Studies Elective.....	3
ECO 110	Economics for Business & Industry	3
		17
	Total Hours	62

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.

Heating & Air Conditioning

(Certificate)

Code 24RG

RAC 110	Theory of Refrigeration.....	5
RAC 174	Applied Electricity.....	4
RAC 118	Residential Heating Systems	4
RAC 119	Electric Motors & Controls.....	5
RAC 173	Air Movement & Ventilation.....	4
RAC 115	Installation and Service Practices for Heating & Air Conditioning	4
	Technical Electives ¹	8
	Total Hours	34

Refrigeration & Air Conditioning

(Certificate)

Code 24RF

RAC 110	Theory of Refrigeration.....	5
RAC 174	Applied Electricity.....	4
RAC 113	Commercial Refrigeration Systems	4
RAC 119	Electric Motors & Controls.....	5
RAC 117	Installation & Service Problems.....	4
	Technical Electives ¹	12
	Total Hours	34

¹ Technical Electives must have previous RAC advisor approval. Typically technical electives are to be chosen from the following: RAC prefix courses, EWE 220 Cooperative Work Experience I, and others approved by advisor.

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
Lewis Baily	AVC-150c
Jerry Kroll, Coordinator	0206
Gary Perdew	0207

Associate in Applied Science

REGISTERED NURSING

(Associate in Applied Science)

Code 21NA

Biological & Health Sciences Division - room C-140, ext. 2445

The Associate Degree Nursing Program 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 agencies.

The program is accredited by the National League for Nursing and approved by the State of Illinois Department of Professional Regulation. 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.

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 also submit a copy of your High School Equivalency (GED) test report.
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 223-6601, ext. 2340 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. Category I admission requirements.
 - C. A grade of "C" or better for two semesters (1 year) of high school algebra,
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
BIO 124	Anatomy and Physiology	5
PSY 121	Introduction to Psychology	3

Second Semester

NUR 172	Nursing: Developmental Self-Care	7
ENG 121	English Composition I.....	3
BIO 125	Introduction to Microbiology	4
PSY 222	Child Growth & Development.....	3

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

Fourth Semester

NUR 272	Nursing: Health Deviation Self-Care II...	9
	Humanistic Studies Elective.....	3
	Elective ¹	3

15

¹Elective must be approved by the Director of Nursing Education. Total Hours 62

For more information on this program, students may contact the division office listed, the Nursing Education office, B152, or the following faculty members:

Name	Office	Extension
Lucille Coleman	B149	2012
Joanne Dude	B147	2336
Tana Durnbaugh	B150	2874
Vicki Francis	B144b	2331
Nikki Hagen	B144b	2871
Sherry Hernandez	B148	2873
Christine Hunt	B148	2332
Barbara McNeill	B150	2333
Carmella Mikol	B143b	2329
Ellen Powell	B147	2872
Darlene Shackelford	B144a	2335
Sue Wynn	B144a	2870

TECHNICAL COMMUNICATION

(Associate in Applied Science)

Code 23TA

Communication Arts, Humanities & Fine Arts Division - room B237, ext. 2550

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	12
Speech Communications	3
Social Science.....	6
Mathematics.....	6
Humanistic Studies.....	3
Data Processing/Word Processing	4
Graphics	6
Technical specialization in no more than two technical areas	15
General electives (as approved by advisor)	5

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, 121 or 122 recommended)....	3-4

Graphics (2-4 hours)

ART 129 Introduction to Photography I or	
ART 222 Introduction to Computer Art or	
DFT 110 Mechanical Blueprint Reading, or	
DFT 111 Drafting I, or	
DFT 117 Machine Sketching & Drafting, or	
ELT 111 Electronic Drafting, or	
EGR 121 Engineering Graphics or	
CAD 112 Introduction to Personal Designer.....	2-5
Social Sciences (3 hours)	
PSY 122 Psychology in Business and Industry	3
Technical Specialty (3-6 hours)	3-6
	<u>15-21</u>

Phase Two: (begin after finishing all courses in Phase One)

Written Communication (3 hours)

ENG 121 English Composition I, or	
ENG 124 Newswriting, or	
ENG 220 Intro. to Scriptwriting-Video, TV & Film	
ENG 222 Creative Writing	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
Humanistic Studies (3 hours)	
PHI 122 Logic or	
HUM 127 Critical Thinking or Humanistic Studies Elective.....	3
Technical Specialty (3-7 hours)	3-7
	<u>15-20</u>

Phase Three: (begin after finishing all courses in Phase Two)

Written Communication (3 hours)

*ENG 126 Advanced Composition: Scientific Technical Communications	3
Social Science elective	3
Graphics (3 hours)	
*ART 111 Printing Production	3
Data Processing/Word Processing (4 hours)	
DPR Elective	1-4
BSS Elective	1-4
Technical Specialty (3-6 hours)	3-6
	<u>16-19</u>

*Required core course.

Associate in Applied Science

Phase Four: (begin after finishing all courses in Phase Three)

Written Communication (3 hours)		
ENG 113	Technical Communication	3
	Practicum or.....	
EWE 220	Cooperative Work Experience I.....	3-4

NOTE: At this point the required total of 60 hours can be made up by additional approved mathematics, graphics or technical specialty electives.

Total Hours for A.A.S. 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)

Code 23TF

Written Communications (12 hours)		
*ENG 120	Technical Composition I.....	3
*ENG 126	Adv. Comp.: Scientific and Technical Communication.....	3
*ENG 113	Technical Communication Practicum.....	3
	Elective.....	3
Choose from:		
	ENG 121 English Composition I	
	ENG 124 Newswriting	
	ENG 222 Creative Writing	
	ENG 220 Intro. to Scriptwriting-Video, TV & Film	
Speech Communication (3 hours)		
SPE 128	Interviewing Practices.....	3
Graphics (8 hours)		
*ART 111	Printing Production.....	3
DFT 110	Mechanical Blueprint Reading or.....	3
	CAD 112 Introduction to Personal Designer or.....	3
DPR 278	Desktop Publishing or.....	2
ART 222	Introduction to Computer Art.....	3
Elective (3 hours)		
	Technical Specialty.....	3
		Total Hours 26

*Required core course.

WATER-WASTEWATER

(Certificate)

Code 24WF

Engineering, Math, Physical Science Division - room B162, ext. 2498

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 - Option:

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 113	Basic Waterworks Operations.....	3
WWW 114	Introduction to Water and Wastewater Analysis.....	3
WWW 115	Intermediate Waterworks Operations.....	3
WWW 117	Intermediate Water and Wastewater Analysis.....	3
	Technical Electives*.....	4
	Total Hours	29

Wastewater Treatment Technician Option:

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

*Technical electives must be approved by the program advisor. Typically, electives are chosen from the following: WWW 118 Advanced Waterworks Operations, Chemistry (CHM), Construction related courses (BCT and CIV), Fluid Power (FLU), Cooperative Work Experience I (EWE 220), PED 228 First Aid, and others.

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

Water-Wastewater

Name	Office
Jerry Leckman, Coordinator	A234

WELDING

(Certificate)

Code 24WL

Engineering, Math, Physical Science Division - room B162, ext. 2498

This certificate program 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

Associate in Applied Science

* Elective may be chosen from MCD (Mechanical Engineering Technology) or IS_ (Industrial Skills) prefixed courses, or PED 228 First Aid, with advisor approval.

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

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..

Welding

Name	Office
Jerry Kroll, Coordinator	0209
Neil Ostro	0209

Gas Tungsten Arc Welding (Specialty Certificate) Code 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) Code 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) Code 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



Course Information and Descriptions

Course Information and Descriptions

Schedule of Classes

Courses listed in this catalog are those the College of Lake County plans 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, published prior to each registration, may be obtained from the Admission Office. It contains a list of classes to be offered and general registration information.

Course Admission Categories

Beginning with the fall 1985 semester, all new students admitted to the College were assigned an admission category code. The College expects all students to either possess at the time of admission or acquire through appropriate study the basic reading, writing, and mathematical skills necessary for success in the course or program of study chosen by the student. An explanation of admission requirements can be found on page 15.

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.

First Digit Indicates Year

Courses numbered 000 to 099 indicate general studies, adult education or continuing education courses. Courses numbered 100-199 are normally freshman courses; 200-299 are usually sophomore courses. 500-899 numbers are general studies or continuing education courses.

Second Digit Indicates Program

Courses number 100-299 with a middle digit of "0" are general studies courses of a continuing education nature designed to prepare students for enrollment in courses at the career or transfer level. They may also prepare the student for personal, academic, professional, vocational, civic, or environmental improvement. **These courses apply only to one of the general studies certificates. They do not apply toward a college degree or career certificates and are not used to compute grade point average.**

Courses numbered 100-299 with a middle digit "1" or "7" or "9" are career oriented courses. Practices 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 in situation directly.

Courses number 100-299 with a middle digit "2," "4," or "6" are transfer courses. These courses have been articulated by the Illinois Community College Board. To ensure a specific course is transferable to a specific senior college or university, students 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, Corequisites, and Concurrent Enrollment

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.

For basic skills prerequisites, i.e. ENG 105, ENG 107, and MTH 101, *equivalent* means placement in admission Category I. For most mathematics courses, *equivalent* includes taking the mathematics diagnostic exam.

Corequisites are other courses, knowledge, skills, or permission that may be obtained or completed before a student enrolls in a course and that must be completed no later than when the student is enrolled in the course.

Concurrent enrollment exists when a student must be enrolled in another course or courses at the same time the student is enrolled in a course.

Sequence of Course Offering

In courses which are generally taken in a sequence of two or more semesters and which are in heavy demand, the first course of the sequence is offered in both fall and spring semester and often during the summer.

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

ACCOUNTING (ACC)

Business Division - Room A143, Ext. 2515

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: ENG 107, and MTH 102; or equivalent.

ACC 113 Accounting Procedures II (3-0) 3 hours

A continuation of Accounting Procedures I. Covers the financial guidance and measurement of activities carried on by the enterprise and its eventual use by management.

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 121

ACC 121 Principles of Accounting I (4-0) 4 hours

Principles of Accounting I is a thorough coverage of financial accounting topics. The first five chapters provide clear, concise coverage of the accounting cycle using the corporate structure to produce general purpose financial statements. Remaining chapters will cover financial topics that will enhance the student's understanding of the general purpose financial statements. NOTE: Minimum time for classwork and homework is 12-15 hours per week. The department assumes that you have business math and reading proficiencies.

Prerequisite: ENG 105, ENG 107, and MTH 108; or equivalent.

ACC 122 Principles of Accounting II (4-0) 4 hours

Accounting Principles II emphasizes *Managerial Accounting*. In Managerial Accounting, emphasis is placed upon the internal rather than the external aspects of everyday business transactions. The student will learn, 1) to evaluate information in terms of its relevancy in the decision making process; 2) techniques of decision making; and 3) to practice these applications as they pertain to the managerial environment. This course is for students seeking an AAS accounting degree or following a transfer program. It is

recommended that the student have obtained a "C" or better in ACC 121. NOTE: Minimum time for classwork and homework is 12-15 hours per week.

Prerequisite: ACC 121

ACC 212 Federal Tax Accounting I (3-0) 3 hours

Practical study of Federal Tax Laws as related to the individual and single proprietorship.

Prerequisite: ACC 121

ACC 213 Federal Tax Accounting II (3-0) 3 hours

Practical study of Federal Tax Laws as related to the single proprietorship, partnerships, and corporations. Recommended: Student should have desire for comprehensive knowledge in tax accounting.

Prerequisite: Minimum Requirements: ACC 212 with "C" or better.

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 in general, standard costs, responsibility accounting and job-order accounting.

Prerequisite: ACC 122

ACC 215 Cost Accounting II (3-0) 3 hours

Students will pursue special topics within the cost accounting setting. In addition to process cost accounting, the individuals will cover cost allocation, joint costs, transfer processing, variance-mix, yield and investigation, cost analysis, inventory planning, control and valuation.

Prerequisite: ACC 214

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, the time value of money, cash, receivables, inventory, and current liabilities. Recommended the student have obtained at least "C" grades or better in Principles of Accounting I and II. Prior or concurrent PC DOS (DPR 190) and LOTUS 1-2-3 (DPR 195) skills or DPR 175 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 Flow. It is recommended that the student have obtained at least a grade of "C" or better, in Intermediate Accounting I. Prior or concurrent enrollment in PC DOS (DPR 190) and LOTUS 1-2-3 (DPR 195) skills or DPR 175 is also recommended.

Prerequisite: ACC 221

Accounting (ACC) Adult Basic Education (ABE) Adult Education (ADE)

ACC 223 Intermediate Accounting III (3-0) 3 hours

An intensive study of financial accounting theory and procedures involving the specialized areas of accounting charges 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. The effects of price changes on the usefulness and reporting of financial information will also be examined.
Prerequisite: ACC 222

ACC 270 Advanced Accounting (3-0) 3 hours

The advanced study of financial accounting theory and practice above the intermediate accounting level. This course covers business combinations, consolidations, partnerships, governmental accounting and accounting for nonprofit organizations. 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, 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, and the Foreign Corrupt Practices Act.
Prerequisite: ACC 222

ADULT BASIC EDUCATION (ABE)

Adult Continuing Education and Extension Services Division, Building 4, Ext. 3635

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.

Note: The following ABE courses do not apply to any associate degree or career certificate program.

Students enrolling in college level instruction and students entering the college on F1 visas are not eligible for tuition free adult education classes.

The adult education program is funded in part by grants totaling \$290,376 from the federal government. This represents 34% of the total cost of the program.

ABE 001 Adult Basic Education I (3-0) 3 hours

Individualized program in reading, language development, mathematics, and life-coping skills. Students progress at their own rates through basic reading, writing and arithmetic skills.

Prerequisite: None

ABE 002 Adult Basic Education II (3-0) 3 hours

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.

Prerequisite: Reading between 6.0 and 7.5 on TABE

ABE 003 Pre-G.E.D. (3-0) 3 hours

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 G.E.D. program.

Prerequisite: Reading between 7.6 and 8.9 on TABE

ADULT EDUCATION (ADE)

Adult Continuing Education and Extension Services Division, Building 4, Ext. 3635

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.

Students enrolling in college level instruction and students entering the college on F1 visas are not eligible for tuition free adult education classes.

The adult education program is funded in part by grants totaling \$290,376 from the federal government. This represents 34% of the total cost of the program.

ADE 016 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.

Prerequisite: None

ADE 017 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.

Prerequisite: None

ADE 025 Special Problems in ESL (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 for formation of words and sentences in writing.

Prerequisite: None

Adult Education (ADE) Anthropology (ANT)

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.

Prerequisite: None

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.

Prerequisite: None

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

ADE 703 Independent Job Search (1-0) 1 hour

An intensive course which will advise students as to how to prepare for, obtain and maintain employment. The course will provide interviewing skills development, application completion, proper attire and resume information as needed.

Prerequisite: None

ADE 924 American Literature (2-0) 2 Hours

The 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.

Prerequisite: None

ADE 925 Advanced Literature (2-0) 2 Hours

The independent study course will introduce students to three novels, each novel being one unit of study. Each unit will include vocabulary which will aid the students in the understanding of the literature being read.

Prerequisite: None

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 kingdom, the animal kingdom, and human biology.

Prerequisite: None

ADE 951 Family Life I (2-0) 2 Hours

An independent study course designed to give students insight into single, married and family life.

Prerequisite: None

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.

Prerequisite: None

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.

Prerequisite: None

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.

Prerequisite: None

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.

Prerequisite: None

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.

Prerequisite: None

ANTHROPOLOGY (ANT)

Social Science Division - Room A243, Ext. 2532

ANT 121 Introduction to Anthropology (3-0) 3 hours

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: ENG 105 and ENG 107

ANT 221 Cultural Anthropology (3-0) 3 hours

The study of the nature and development of culture. The economic, political, religious, and social organizations of selected human groups are examined, compared and evaluated. Explores the cultural determinations of individual human behavior and means of adaptation.

Prerequisite: ENG 105 and ENG 107

Anthropology (ANT) Architectural Technology (ARC) Art (ART)

ANT 224 Introduction to Archaeology (3-0) 3 hours

A survey of the concepts and methods essential to the study of prehistoric cultures with emphasis on the prehistoric cultures of the Americas. Topics include site location, techniques of excavation, methods of dating artifacts and sites, analysis of artifacts, reconstruction of culture history and cultural resource management. ANT 121 is recommended but not required to enroll in this course.

Prerequisite: ENG 105 and ENG 107

ARCHITECTURAL TECHNOLOGY (ARC)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

ARC 121 Architectural Graphics (2-3) 3 hours

Presents fundamental principles of graphical communications in architectural terms and enables development of student skills in the use of technical drawing equipment. Students must furnish basic required equipment.

Prerequisite: CSS 103 and MTH 102.

Course fee

ARC 170 Architectural Design (2-3) 3 hours

Acquaints student with functional design aspects of architecture. Involves practical experience in planning and drawing buildings and building sites. Student must furnish basic required equipment.

Prerequisite: ARC 121

Course fee

ARC 171 Architectural Working Drawings (2-3) 3 hours

This course provides the student with the opportunity of applying information about building components by drawing detailed sets of architectural construction drawings.

Prerequisite: ARC 121

Course fee

ARC 211 Structural Steel Design (2-3) 3 hours

Relating steel structure components to a total structural system. Student must furnish basic required equipment.

Prerequisite: EGR 215

Course fee

ARC 214 Reinforced Concrete and Timber Design (2-3) 3 hours

Relating concrete and timber structure components to total structural system. Student must furnish basic required equipment.

Prerequisite: EGR 215

Course fee

ARC 215 Architectural Planning (2-3) 3 hours

Synthesis of all information previously learned to complete an architectural project. Student must furnish basic required equipment.

Prerequisite: Last semester standing

Course fee

ARC 216 Architectural Illustration (2-3) 3 hours

Sketching and rendering of interiors and exterior of buildings to produce professional presentation quality drawings often termed "Artist Conception." Students will use pencil, pen, colored markers, colored pencils and other media including optional use of Computer Aided Design (CAD).

Prerequisite: ARC 121

Course fee

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: CSS 103 and ENG 107.

ARC 271 Architectural Working Drawings II (2-3) 3 hours

Course is 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 171 Architectural Working Drawings or equivalent experience

ART (ART)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

ART 111 Printing Production (3-0) 3 hours

Survey of the graphic arts process from the written copy to the printed piece. Students will learn the terminology needed to communicate with others in the field. Specific projects in design, layout, proofreading, copyfitting, paste-up and some writing will be assigned. A more general knowledge of printing processes and color separation will be acquired through field trips and guest lecturers. Students will need to furnish their own tools. Materials will be supplied. Overview of printing technology.

Prerequisite: CSS 103 or equivalent.

Course fee

ART 121 Introduction to Art (3-0) 3 hours

A beginning course in the appreciation of art (using art of the 20th century primarily) and in "learning to look."

Prerequisite: ENG 105 and ENG 107 or equivalent.

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.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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 or ART 124

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.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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. (This course is primarily designed as a methods course for those people who would wish to become elementary art teachers.)

Prerequisite: ENG 105 and ENG 107; or equivalent.

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

ART 127 Intermediate Drawing (0-6) 3 hours

Advanced problems of graphic communication through exploration of varied drawing media and techniques.

Prerequisite: ART 124

ART 128 Watercolor (0-4) 2 hours

Understanding of methods and techniques of water-soluble painting media and developing problems of composition.

Prerequisite: ART 124

ART 129 Introduction to Photography I (2-2) 3 hours

Introductory course in black and white photography covering the camera, darkroom equipment, black and white film processing, black and white printing and dry mounting. Emphasis on development of technical skills and classical black and white printing. Students must supply a 35 mm camera, film, photographic paper and dry mounting materials.

Prerequisite: ENG 105 and ENG 107; or equivalent.

Course fee

ART 221 Advanced Design (0-6) 3 hours

Studio experience and study of three dimensional materials, forms, and concepts.

Prerequisite: ART 122

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.

Prerequisite: ART 122 and ART 124.

ART 223 Introduction to Sculpture (0-6) 3 hours

Introduction to materials and techniques of the sculptor in creation of three-dimensional forms.

Prerequisite: ENG 105 and ENG 107; or equivalent.

Course fee

ART 224 Beginning Painting (0-6) 3 hours

Understanding of methods and techniques of various painting media and developing problems of composition.

Prerequisite: ART 124 or demonstrated competence

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 124

Course fee

ART 226 Introduction to Ceramics (0-6) 3 hours

This course is designed to teach students basic pottery handbuilding, wheel throwing and glazing techniques.

Prerequisite: ENG 105 and ENG 107; or equivalent.

Course fee

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 (ART) Auto Body Repair and Painting (ABT) Automotive Technology (AUT)

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

Continued development of skills in processing and printing black and white materials with an emphasis on image making.

Prerequisite: Successful completion of ART 129 *Lab fee*

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: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

ART 243 Introduction to Printmaking I (0-6) 3 hours

Introduction to printmaking as a fine art. Execution of prints in relief, intaglio, lithographic, and silkscreen processes.

Prerequisite: ART 122 or ART 124, or demonstrated competence

Course fee

ART 244 Color Slides (3-0) 3 hours

A non-darkroom introductory course in color photography. The course will cover color theory, color films, color filtration, and a survey of the development of color printing. Students must supply a camera, color film and processing, and a carousel slide tray.

Prerequisite: ART 129

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: ART 226, ART 246

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.

Prerequisite: Sophomore standing. Must have successfully completed all possible courses in a discipline, e.g., painting, printmaking, sculpture, design, drawing, photography or art history. Instructor consent or approval of the associate dean

Course fee

AUTO BODY REPAIR AND PAINTING (ABR)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

ABR 110 Auto Body I (2-6) 5 hours

Introduces fundamental concepts of auto body repair and refinishing through demonstrations, reading assignments, films and extensive hands-on shop experience.

Prerequisite: None

Course fee

ABR 111 Auto Body II (2-6) 5 hours

Minor repairs of bumps, scratches, rust problems of cars are stressed. Straightening of doors, hood, and deck lids, fitting and aligning are emphasized. Continuing improvement of skills learned in Auto Body I.

Prerequisite: ABR 110

Course fee

AUTOMOTIVE TECHNOLOGY (AUT)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

AUT 171 Engine Rebuilding (4-2) 5 hours

Rebuilding of engines, including theory, diagnosis, measurement, light machining, and correct reassembly procedures. The lubrication, electrical, cooling, and fuel support systems are included.

Prerequisite: None

Course fee

Automotive Technology (AUT) Biology (BIO)

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.

Prerequisite: None

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.

Prerequisite: None

AUT 175 Braking Systems (4-2) 5 hours

Theory of operation, diagnosis, maintenance, and repair procedures pertaining to automotive braking systems.

Prerequisite: None

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.

Prerequisite: None

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.

Prerequisite: None

AUT 271 Fuel Systems I (4-2) 5 hours

Focus of the course is to give the student a thorough understanding of the principles of carburetion, exhaust systems, and fuel delivery systems and components.

Prerequisite: None

Course fee

AUT 272 Fuel Systems II (4-2) 5 hours

Emphasis is placed on comprehensive diagnosis, testing and service of fuel injection systems, computerized carburetor systems, turbo-charging and emission control systems.

Prerequisite: AUT 271

Course fee

AUT 273 Transmissions I (4-2) 5 hours

Theory of operation, diagnosis, maintenance, and repair procedures pertaining to manual transmissions, transaxles, clutches, propeller shafts, and final drives.

Prerequisite: None

Course fee

AUT 274 Transmissions II (4-2) 5 hours

Theory of operation, diagnosis, maintenance, and repair procedures pertaining to automatic transmissions and torque converters.

Prerequisite: None

Course fee

AUT 275 Air Conditioning and Heating (4-2) 5 hours

Gives the beginning automotive technician the opportunity to gain an understanding of the theory of automotive air conditioning and heating systems, and service procedures related to those systems.

Prerequisite: None

Course fee

AUT 276 Engine Systems Diagnosis (4-2) 5 hours

Gives the automotive technician the opportunity to review and enhance his theory and service skills in automotive electrical systems, fuel systems, engine diagnosis, and pollution controls systems and devices.

Corequisite: AUT 173, AUT 272

Course fee

AUT 277 Advanced Specialization (2-7) 5 hours

Gives the automotive student the opportunity to choose and specialize in an area of interest for the purpose of preparing for employment.

Corequisite: 20 credits in AUT courses

Course fee

BIOLOGY (BIO)

Biological & Health Sciences Division, Room C140, Ext. 2445

BIO 120 Environmental Biology (3-2) 4 hours

A study of the relationship between humans and our 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. Recommended for non-science majors needing a one-semester laboratory science. Local field trips during scheduled lab periods.

Prerequisite: ENG 105, ENG 107 and MTH 102; or equivalent.

Course fee

Biology (BIO)

BIO 121 General Biology I (3-2) 4 hours

Introduction of basic biologic principles, aimed at an understanding 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. Intended for science majors and allied health students. Knowledge of basic chemistry is helpful.

Prerequisite: ENG 105, ENG 107 and MTH 102; or equivalent.

Course fee

BIO 122 General Biology II (3-2) 4 hours

A continuation of BIO 121. Topics include embryology, evolution, plant and animal diversity, animal behavior, and ecology. Includes experimental and computer laboratory exercises.

Prerequisite: BIO 121

Course fee

BIO 124 Anatomy and Physiology (3-4) 5 hours

An introductory course covering the structure and function of the human body. All of the major systems (skeletal, muscular, nervous, endocrine, etc.) are covered. Human skeletons, human models and pre-dissected cats are used in lab as representatives of human anatomy. Physiology exercises such as E.K.G., muscle contraction and urinalysis are also performed in lab. Recommended for students in allied health professions.

Prerequisite: BIO 121

Course fee



BIO 125 Introduction to Microbiology (2-4) 4 hours

An introduction to the study of 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. A beginning college level chemistry course is strongly recommended

Course fee

BIO 126 Local Flora (1-4) 3 hours

An introduction to the methods of field identification of the vascular plants of northeastern Illinois. Use of taxonomic keys, collection techniques and general habitat information will be included.

Prerequisite: ENG 105 and ENG 107; or equivalent.

Course fee

BIO 127 Introduction to Evolution (3-0) 3 hours

This course will examine the concept of evolution and mechanisms by which evolution may proceed. It will include a thorough analysis of the evidence of evolution, and a brief treatment of challenges to evolution. Primarily for non-majors.

Prerequisite: ENG 105, ENG 107 and MTH 102; or equivalent.

BIO 128 Natural History of Selected Areas (2-2) 3 hours

Natural history of an area selected for its unique biological communities; considers the organisms and ecological relationships, emphasizing the effects of human activity. Taught as a field course which may include camping, backpacking and/or canoeing. Travel expenses paid by the student. Should be considered a liberal education elective; will not meet science requirement.

Prerequisite: ENG 105 and ENG 107; or equivalent.

BIO 211 Laboratory Techniques for the Bio Technician (2-6) 5 hours

Laboratory procedures concerned with preparation of materials, separation of materials, analysis of experiments, identification of biological materials, and laboratory instrumentation will be described and applied during this course. This will include presentation of some of the more sophisticated lab procedures used by local industry. Application of microcomputers to biological phenomena will be included.

Prerequisite: CHM 123 and BIO 125

Course fee

BIO 221 General Zoology (2-4) 4 hours

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

Course fee

BIO 222 General Botany (2-4) 4 hours

A comparative study of plant life from algae through the flowering plants. Morphology, ecology and evolution will be stressed. Some attention will be given to identification of local flora.

Prerequisite: BIO 120, BIO 121, or HRT 111

Course fee

BIO 224 Human Heredity and Evolution (3-2) 4 hours

For the non-biology major student interested in learning about the heredity and evolution of man. Topics include cell structure and function, the nature of the gene, Mendelian genetics, hereditary disorders, genetic counseling, evolution, eugenics and genetic manipulation.

Prerequisite: None

Course fee

BIO 225 Environmental Problems (2-4) 4 hours

Intended for students not majoring in biology that are interested in continuing to learn about ecology and current environmental problems after they finish BIO 120 Environmental Biology. 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.

Prerequisite: BIO 120

Course fee

BIO 226 Field Biology (2-2) 3 hours

A study of plant and animal communities in various biomes; including collection, identification and preservation of organisms; life histories and interdependence of organisms within the communities. Travel expenses are paid by the student.

Prerequisite: None

BUILDING CONSTRUCTION TECHNOLOGY (BCT)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

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.

Corequisite: MTH 117

Course fee

BCT 112 Construction Blueprint Reading (3-0) 3 hours

Provides 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. Students in BCT program should take this 1st semester.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

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: ENG 105, ENG 107 and MTH 101; or equivalent.

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. *Prerequisite:* ENG 105, ENG 107 and MTH 101; or equivalent. (BCT 113 or equivalent construction experience is recommended.)

BCT 118 Mechanical and Electrical Equipment (3-0) 3 hours

The equipment and materials used in the electrical, mechanical and environmental systems of buildings. BCT 112 or equivalent construction experience is recommended.

Prerequisite: MTH 117

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.

Prerequisite: BCT 112 or equivalent construction experience

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.

Prerequisite: BCT 112 or equivalent construction experience

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. Satisfies CIV 112 course requirement.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

Building Construction Technology (BCT) Business Administration (BUS)

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.

Prerequisite: BCT 112 or equivalent construction experience

BCT 214 Construction Estimating (3-0) 3 hours

The theory, principles and techniques of construction material, quantity analysis (take-off). Analysis of labor, overhead and profit is also introduced.

Prerequisite: BCT 112 or equivalent construction experience

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. BCT 211 or equivalent construction experience is recommended.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

BUSINESS ADMINISTRATION (BUS)

Business Division, Room A143, Ext. 2515

BUS 111 Fundamentals of Finance (3-0) 3 hours

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: ENG 105 and ENG 107; or equivalent.

BUS 114 Training Principles and Practices (3-0) 3 hours

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 fields 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.

Prerequisite: CSS 103 or equivalent.

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: ENG 105, ENG 107 and MTH 101; or equivalent.

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. Prior or concurrent enrollment in BUS 121 is strongly recommended.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

BUS 211 Practicum in Business-Management (0-15) 3 hours

For students pursuing a 2-year degree in Mid-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: 30 hours in Business-Management

BUS 212 Industrial Marketing (3-0) 3 hours

Management problems and policies in marketing various types of products to industrial buyers; special problems connected with purchases and sales of industrial goods as 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. Prior enrollment in PSY 121 or PSY 122 recommended.

Prerequisite: BUS 121 or prior sales experience.

BUS 214 Advertising (3-0) 3 hours

Study of various advertising media and selection of appropriate media to equip business person with best tools to improve his or her business. Principles of copywriting, layout, printing, budget setting and the legal aspects of advertising are also covered.

Prerequisite: BUS 121

BUS 215 Production and Inventory Control (3-0) 3 hours

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: BSS 122 or MTH 108 or MTH 121

Business Administration (BUS) Business Education/Office Systems Technology (BSS)

BUS 217 Marketing Communications (3-0) 3 hours

Concentrates on the development of a promotional mix for an individual firm. Each component of the mix—Advertising, Personal Selling, Sales Promotion, Publicity and Public Relations—is related to their role in meeting promotional objectives. Analyzes and develops the marketing communications needs of special groups: consumers, intermediaries, suppliers, financial community, employees and interest groups; and government.

Prerequisite: BUS 122 or BUS 212

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 associate dean

BUS 221 Business Law I (3-0) 3 hours

Introduces principles of American law governing business and personal transactions. Areas covered include contracts and agency. 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 associate dean

BUS 225 Retail Merchandising (3-0) 3 hours

Retailing merchandising is a continuation of the Principles of Retailing course. Designed to enable students to comprehend the workings and concerns of the successful retail operation. Topics include: customer services, merchandising policies, employer-employee relationships, pricing policies and marketing strategies.

Prerequisite: BUS 224

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. There is an exercise in import-export which requires a term paper. (Formerly a BUS 299 topic.)

Prerequisite: BUS 121

BUS 299 Selected Topics in Business (Variable) 1-3

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. Topics will be identified for each section of the course.

Prerequisite: Will depend on selected topic.

BUSINESS EDUCATION/OFFICE SYSTEMS TECHNOLOGY (BSS)

Business Division, Room A143, Ext. 2515

BSS 111 Business Communications (3-0) 3 hours

A course designed to help students in all phases of business letter writing and communications. The course is designed for accountants, salespersons, secretaries, administrative assistants, administrators, and other office personnel. The following topics are emphasized: sentence and paragraph construction, the composition of standard types of business letters, employment letters, and interoffice correspondence; and review of grammar and punctuation required for effective communications.

Prerequisite: ENG 105 and ENG 107; or equivalent.

BSS 112 Automated Office Technologies (3-0) 3 hours

This course provides a comprehensive study of the use of automated technologies by office personnel. The presentation of topics, along with supporting hardware and software hands-on experiences, includes information management and retrieval, information analysis and presentation, electronic communications, networking, electronic desktop management and emerging technologies.

Prerequisite: ENG 105 and ENG 107; or equivalent.

BSS 114 Word Processing Equipment (.5-2) 1 hour

Introductory course in the use and operation of word processing software on a microcomputer. Topics covered include recording, basic editing, and printing.

Prerequisite: BSS 128 or 40 wpm, ENG 105 and ENG 107; or equivalent.

Course fee

Business Education/Office Systems Technology (BSS)

BSS 115 Word Processing Equipment Applications (.5-2) 1 hour

Designed for learning advanced, specialized features and operations of information processing equipment. The course will also include projects applicable to office applications.

Prerequisite: BSS 114

Course fee

BSS 116 Advanced Word Processing Equipment Applications (.5-2) 1 hour

Designed for learning advanced, specialized operations of word processing software and the use of a desktop management software package.

Prerequisite: Completion of specified machine/software in BSS 115.

Course fee

BSS 117 Machine Transcription (2-0) 2 hours

Detailed instruction and practice in machine transcription techniques; transcription of letters and memos; application of language and vocabulary skills and proofreading. Concurrent enrollment in BSS 172. Proofreading is recommended.

Language skills proficiency required. If deficient, concurrent enrollment is recommended in ENG 103 and/or ENG 104 and/or ENG 106.

Prerequisite: BSS 128 or 45 wpm

Course fee

BSS 118 Graphics and Desktop Publishing (1-0) 1 hour

An introduction to graphics and desktop publishing using word processing software. Topics include basic desktop publishing terminology, document organization, graphics, typestyles, typographic refinements and stylesheets. Students will plan and produce documents combining both text and graphics on IBM PS/2 computers. Lab time outside class is required. Basic knowledge of specified word processing software is required.

Prerequisite: BSS 117 and BSS 115

Course fee

BSS 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 include database software use.

Prerequisite: CSS 103 and ENG 107; or equivalent.

BSS 122 Business Mathematics (3-0) 3 hours

Basic application of arithmetic in business. Areas of study include: review of fractions and decimals, equations, percentage, ratio and proportion, discounts and pricing, simple and compound interest, inventory, depreciation, installment buying and present value.

Prerequisite: CSS 103 and MTH 101; or equivalent.

BSS 123 Shorthand I (2-2) 3 hours

Building of basic theory and elementary vocabulary of Gregg Shorthand for students with no previous shorthand instruction.

Corequisite: BSS 171, 35 wpm, or concurrent enrollment in Beginning Typing II.

Course fee

BSS 124 Intermediate Shorthand (2-2) 3 hours

Continued study of Gregg Shorthand emphasizing vocabulary development, dictation, transcription and mailability of business letters.

Prerequisite: BSS 123 with a grade of "C" or better, or one year of high school shorthand instruction with a grade of "C" or better. BSS 171 or one year of high school typewriting

Course fee

BSS 128 Intermediate Typing (3-2) 4 hours

Intermediate Typing 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. This course includes weekly out-of-class assignments.

Prerequisite: BSS 171 or 30 WPM on a 5-minute timing

Course fee

BSS 170 Beginning Typing I (1.5-1) 2 hours

This course is designed to teach the alphabetic keyboard using proper "touch" typing techniques. BSS 170 provides the initial instruction leading to an employable skill level, and it meets the needs of individuals seeking basic keyboarding skills for microcomputers. Emphasis will be placed on building speed and accuracy. **THERE ARE DAILY OUT-OF-CLASS ASSIGNMENTS TO BE COMPLETED ON CLC COMPUTERS.**

Prerequisite: CSS 103 or equivalent.

Course fee

BSS 171 Beginning Typing 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" typing techniques. The numeric/symbolic keyboard and proper formatting of basic business documents used in today's offices will be introduced. **THERE ARE DAILY OUT-OF-CLASS ASSIGNMENTS TO BE COMPLETED ON CLC COMPUTERS.**

Prerequisites: BSS 170 or 20-25 WPM on a 5-minute timing.

Course fee

BSS 172 Proofreading (3-0) 3 hours

This course is designed to teach proofreading skills necessary to assure accuracy in written communications in the business office. Course includes an intensive review of grammar and punctuation as well as a thorough presentation on correct business word usage, capitalization, plurals and possessives, and abbreviations.

Prerequisite: ENG 105 and ENG 107; or equivalent.

BSS 173 Beginning Electronic Printing Calculator (0-2) 1 hour

Fundamentals of operating the electronic printing calculator. This course uses a self-paced approach to learning.

Prerequisite: CSS 103 and MTH 101; or equivalent.

Course fee

BSS 174 Advanced Electronic Printing Calculator (0-2) 1 hour

Development of advanced skills in the application of business mathematics to the electronic printing calculator involving the use of memory function. This course uses a self-paced approach to learning.

Prerequisite: BSS 173

Course fee

BSS 176 Microcomputer Word Processing (1-0) 1 hour

Basic use and operation of word processing software on microcomputers for the non-word processing major.

Microcomputer lab time outside of class is required. This course is not for OST majors.

Prerequisite: BSS 170, or an equivalent high school typing course

Course fee

BSS 177 Beginning Speedwriting (2-2) 3 hours

A beginning speedwriting shorthand course offering instruction in basic theory principles, business vocabulary, and dictation skills.

Prerequisite: BSS 171 or the ability to type 35 words per minute, or concurrent enrollment in BSS 171. BSS 172 is recommended.

BSS 178 Intermediate Speedwriting (2-2) 3 hours

Continued study of speedwriting shorthand emphasizing vocabulary development, dictation, transcription, and mailability of business letters.

Prerequisite: BSS 177 with a grade of "C" or better, or one year of high school instruction with a grade of "C" or better. BSS 171 or one year of high school typewriting.

BSS 223 Advanced Typing (3-2) 4 hours

Advanced Typing focuses on two goals: increasing speed/accuracy on straight-copy timings and increasing the production rate of complex and specialized documents used in the fields of marketing, law, medicine, and government. This course includes weekly out-of-class assignments.

Prerequisite: BSS 128 or 45 WPM on a 5-minute timing.

Course fee

BSS 225 Practicum in Secretarial Science (0-15) 3 hours

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

BSS 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. Topics will be identified for each section of the course. Repeatable 3 times or up to 4 hours.

Prerequisite: Would depend upon the selected topic

Course fee

CHEMISTRY (CHM)

Biological & Health Sciences Division, Room C140, Ext. 2445

CHM 120 Chemical Concepts (3-2) 4 hours

A survey course in chemistry designed for the non-science major. Lectures treat 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.

Prerequisite: ENG 107 and MTH 102.

Course fee

CHM 121 General Chemistry I (3-4) 5 hours

Designed to develop an analytical approach to physical problems, to introduce the student to selected topics of chemistry and to provide the student with a basic understanding of the underlying principles of structure, energy and reactivity. The topics selected are: stoichiometry, gas laws, thermochemistry, atomic structure, periodicity, molecular geometry and states of matter.

Prerequisite: ENG 107 and MTH 108; or equivalent.

Course fee

CHM 123 General Chemistry II (3-4) 5 hours

Covers some of the topics presented in CHM 121 in more detail; presents the topics of solutions, equilibria, kinetics, acids and bases, solubility, thermodynamics and electrochemistry. There is also introductory work in qualitative analysis.

Prerequisite: CHM 121

Course fee

CHM 125 Elementary Organic Chemistry (3-4) 5 hours

Survey of organic chemistry providing a basic understanding of nomenclature, structure and reactivity. Spectroscopy, stereochemistry and biochemistry are introduced.

Prerequisite: CHM 121

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

Course fee

Chemistry (CHM) Chinese (CHI) Civil Technology (CIV)

CHM 222 Organic Chemistry I (3-4) 5 hours

Provides the student with 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; major substitution, addition and elimination reaction mechanisms; stereochemistry; basic laboratory techniques involving separation, identification and synthesis of organic compounds.

Prerequisite: CHM 123

Course fee

CHM 223 Organic Chemistry II (3-4) 5 hours

Continuation of CHM 222. Fundamental principles of organic chemistry stressing the preparation, reactions, mechanisms, and structure of organic compounds. Topics to include: spectroscopy, functional groups, carbanion condensation, reactions, polymers and polymerizations, carbohydrates, aminoacids, and proteins.

Prerequisite: CHM 222

Course fee

CHM 224 Elementary Biochemistry (3-4) 5 hours

Designed to provide an understanding of the basic principles, concepts, terminology and laboratory techniques of biochemistry. Students will study cell structure, types of biochemical compounds, nomenclature, reaction pathways, information and energy systems, and isolation and identification techniques.

Prerequisite: CHM 125 or CHM 222 or CHM 223

Course fee

CHINESE (CHI)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

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.

Prerequisite: None

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.

Prerequisites: CHI 121 or equivalent.

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.

Prerequisites: CHI 122 or equivalent.

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.

Prerequisites: CHI 221 or equivalent.

CIVIL TECHNOLOGY (CIV)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

CIV 111 Surveying I (2-3) 3 hours

Principles, field practice, and calculation; general use and care of steel tapes, levels, and transits involved in plane surveying, topographic and stadia surveys.

Prerequisite: MTH 115 or equivalent

Course fee

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.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

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.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

CIV 211 Surveying II (2-3) 3 hours

Horizontal and vertical controls, horizontal and parabolic curve geometrics, triangulations, elements of geodetic surveys, latitudes and departures, and basic area and volume computations.

Prerequisite: CIV 111 and MTH 117

Course fee

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.

Prerequisite: MTH 117

Course fee

CIV 213 Subdivision Planning & 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.

Prerequisite: MTH 115 or equivalent

Course fee

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.

Prerequisite: MTH 117

Course fee

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. Student must furnish basic required equipment.

Prerequisite: Sophomore standing and division approval

Course fee

COLLEGE STUDY SKILLS (CSS)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

Note: The following CSS courses do not apply to any associate degree or certificate program.

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. 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.

Prerequisite: Placement score.

CSS 102 Basic Skills of Reading and Writing (3-0) 3 hours

This course will provide students with intensive practice in reading, writing and thinking skills. It will concentrate on the ability to read short passages, improve thinking skills and develop a positive self-concept.

Prerequisite: Placement score.

CSS 103 Developmental Skills of Reading and Writing (3-0) 3 hours

This course will provide students with continued intensive practice in reading, writing and thinking skills. It will concentrate on reading longer passages, expanding vocabulary skills, writing and revising paragraphs, strengthening thinking skills and improving self-concepts.

Prerequisites: CSS 102

COMPUTER AIDED DESIGN (CAD)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

CAD 110 CAD/CAM Concepts (3-0) 3 hours

Introductory level course designed to provide the student with an understanding of the role of computers in design and manufacturing processes. Individuals responsible for selection, implementation, integration and use of a CAD/CAM system as it relates to an existing manufacturing environment should benefit from this course.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

CAD 112 Introduction to Personal Designer (2-2) 3 hours

Designed to help students develop the knowledge, skills and attitudes required to understand the operation and applications of a network CAD/CAM system. Personal Designer software is used.

Prerequisite: EGR 121 or DFT 111 or ARC 121 or equivalent and CAD 110 or DPR 190 or equivalent.

Course fee

CAD 113 3-D Modeling & Surfacing (2-2) 3 hours

This course will build and expand upon Personal Designer basic concepts that were learned in CAD 112, as well as introduce more sophisticated applications related to mechanical design.

Prerequisite: CAD 112

Course fee

CAD 115 CAD Electrical Schematic and Printed Circuit Design (2-2) 3 hours

An intensive laboratory centered course aimed at training new users in computer aided printed circuit design and electrical schematic applications. The student will gain a thorough knowledge of digitizing a schematic, building a parts library, running and merging a net list, and routing a printed circuit board.

Prerequisites: ELT 111 and CAD 112 or CAD 117

Course fee

CAD 116 Introduction to CADKEY (2-2) 3 hours

An introduction to the use of the microcomputer for computer aided design drafting using CADKEY software.

Prerequisite: DFT 111 or EGR 121 or ARC 121 or equivalent.

Course fee

CAD 117 Introduction to AutoCAD (2-2) 3 hours

The course is designed to introduce students to the use of the microcomputer for computer-aided design and drafting. Software to be emphasized in this course will be the current release of AutoCAD provided by AUTODESK, INC.

Prerequisite: DFT 111 or EGR 121 or ARC 121 or equivalent and CAD 110 or DPR 190 or equivalent.

Course fee

Computer Aided Design (CAD) Cooperative Education (EWE)

CAD 118 CAD/CAM Numerical Control (2-2) 3 hours

Computer Aided Design and Manufacturing processes are discussed and implemented in this course. Parts will initially be drawn in the CAD environment. The NC instructions necessary to drive a CNC machine tool to make these parts will then be generated in the CAM environment.

Prerequisites: CAD 112 and ISM 115

Course fee

CAD 119 Introduction to Intergraph Microstation (2-2) 3 hours

The course will introduce the students to the Intergraph Microstation CAD system, a PC version of the popular Intergraph CAD software. Topics include two and three dimensional modeling, drawing on various levels, dimensioning and related topics.

Prerequisite: ARC 121 or EGR 121 or DFT 111 and CAD 110 or DPR 190 or equivalent.

CAD 177 Site Plan 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.

Prerequisite: ARC 121 or DFT 111 or EGR 121 or equivalent.

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 112

Corequisite: DFT 112 or equivalent.

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 and ASG Architectural or other 3rd party architectural software.

Prerequisite: ARC 121, ARC 170, ARC 171, and CAD 117 or equivalent.

CAD 217 AutoCAD II (2-2) 3 hours

Designed as a continuation of Introduction to AutoCAD and prepares students to use all the capabilities of the AutoCAD software including 3D, Menus, Macros, Introduction to AutoLISP, Advanced DOS, and third party software.

Prerequisite: CAD 117 or equivalent

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 or equivalent.

CAD 273 Special Topics in CAD (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.

Prerequisite: Determined by instructor depending on nature of the project.

COOPERATIVE EDUCATION (EWE) EDUCATIONAL WORK EXPERIENCE

Cooperative Education Office, Room B201,
Ext. 2423 or 223-3611

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.

A one-credit work related seminar portion is required as part of the CO-OP program. The seminar offers options that focus on topics related to job search skills and the psychology of work.

Students who have met the prerequisite credit hours and minimum G.P.A. 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 and 1.00 to 3.00 credit hours for EWE 270. Contact the CO-OP Coordinator, Room B201 for specific registration information and approval (223-3611).

EWE 220 Cooperative Work Experience I (Variable) 1-4 hours

For career and transfer students. One credit for required seminar portion and one to three credits for work portion (job related learning objectives).

Prerequisites:

1. Nine credits toward the students' career or transfer program (45 credits if an AAS in Data Processing).
2. CO-OP Coordinator and faculty sponsor approval.

EWE 270 Cooperative Work Experience II (Variable) 1-3 hours

For second semester CO-OP students. Additional credit is earned for completion of new learning objectives on the job. Seminar portion not required.

Prerequisites:

1. EWE 220.
2. CO-OP Coordinator and faculty sponsor approval.

CRIMINAL JUSTICE (CRJ)

Social Science Division, Room A244, Ext. 2532

CRJ 111 Introduction to Policing (3-0) 3 hours

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: ENG 105 and ENG 107; or equivalent.

CRJ 112 Police Administration (3-0) 3 hours

Analyzes the administration of police operations with emphasis on the patrol function. Students will study the distribution of personnel, specialized operational units, and issues facing the police administrator in American society.

Prerequisite: CRJ 111 or equivalent.

CRJ 113 Security Administration (3-0) 3 hours

Organization and management of security operations including commercial, industrial and private security. Use of various security techniques for protection of life and property. Legal and technical problems of security operations.

Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 114 Penology and Corrections (3-0) 3 hours

Examines the history, philosophy, and administration of corrections in America. 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: ENG 105 and ENG 107; or equivalent.

CRJ 115 Introduction to Security (3-0) 3 hours

Examines the historical, philosophical, and legal basis of security and the security individual in modern society. Students will be exposed to civil and criminal law pertaining to security, report writing, the concept of professionalism, interpersonal relations, and the physical aspects of the security field.

Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 116 Retail Security and Loss Prevention (3-0) 3 hours

The operation of security departments including functions of mercantile establishments; dishonest employees; shoplifters; management and public relations; receiving, shipping and warehousing; special laws and procedures. An overview of the functional operations of various specialized areas of security surveys and loss prevention management in proprietary and governmental institutions.

Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 117 Community-Based Corrections (3-0) 3 hours

Examines the use of the community in the treatment and control of individuals in the correctional process. Students will be 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: ENG 105 and ENG 107; or equivalent.

CRJ 118 Introduction to Criminalistics (2-2) 3 hours

An introduction to the scientific aspects of criminal investigations. The value of physical evidence will be demonstrated, problems and procedures in handling evidence is 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

Designed to provide the student with the knowledge and skills necessary for the supervision of inmates in the correctional environment. Emphasis will be placed on the evolution of confinement, the nature of captivity, management styles in the custodial setting, interpersonal psychology and communication skills for work with inmates, policies and procedures, correctional programs, inmate grievance, stress management, and legal and ethical issues in correctional supervision.

Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 121 Introduction to Criminal Justice (3-0) 3 hours

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: ENG 105 and ENG 107; or equivalent.

CRJ 123 Introduction to Criminology (3-0) 3 hours

Includes a survey of criminological theories, crime causation, criminal expressions, and victimology. The topics are studied from the vantage point of their social and legal dimensions.

Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 210 Criminal Law (3-0) 3 hours

Explores the history and development of the criminal law as a system of social control. Emphasis is placed on legal principles and substantive law. Elements of a crime, specific statutes, and various affirmative defenses are analyzed.

Prerequisite: ENG 105 and ENG 107; or equivalent.

Criminal Justice (CAD) Data Processing (DPR)

CRJ 211 Criminal Procedure and Evidence (3-0) 3 hours
Exposes the student to rules of evidence and criminal procedure in such areas as arrest, search and seizure, interrogation, use of force, and due process of law. Emphasis is placed on Constitutional interpretations of criminal procedure by the United States Supreme Court.
Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 212 Traffic Administration (3-0) 3 hours
History and growth of traffic problems; organization for traffic control; accident investigation, analysis and interpretation of accidents. Survey of traffic laws including Illinois Vehicle Code.
Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 213 Law Enforcement and Community Relations (3-0) 3 hours
Survey of police and community relations field. Special emphasis on the importance of reducing crime, crime prevention, measurement and evaluation. Impact of the criminal justice system and the community in crime prevention.
Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 214 Vice and Drug Control (3-0) 3 hours
Historical and sociological development of vice control and drug addiction. Legal and operational problems of drug and vice control.
Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 215 Issues in Criminal Justice (3-0) 3 hours
Critical issues related to the criminal justice system will be explored. In-depth study of a specific current issue in criminal justice will be offered.
Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 216 Police Supervision (3-0) 3 hours
Fundamentals of supervisory techniques and personnel management practices. Special problems of police supervision. Principles of leadership and teaching.
Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 217 Police Defense Techniques (1-2) 2 hours
Principles necessary for self defense and weaponless control. Psychology in use of force, physical and mental preparation and practice in realistic defense and control techniques. Proper search procedures for police officer.
Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 218 Criminal Justice Internship (0-16) 3 hours
Designed to broaden educational experience of students through appropriate observation of selected criminal justice agencies. Correlation of theoretical knowledge with actual practice. Students assigned to local criminal justice and/or related agencies for a maximum of 16 hours per week.
Prerequisite: Criminal Justice major with minimum of 30 semester hours completed and approval of criminal justice coordinator

CRJ 219 Principles of Criminal Investigation (3-0) 3 hours
Introduction of criminal investigation procedure; theory and practice of investigations; conduct at crime scenes; collection and preservation of evidence and methods used in police science laboratory.
Prerequisite: ENG 105 and ENG 107; or equivalent.

CRJ 220 Independent Research (variable) 3 hours
Independent research and study under the direct supervision of a faculty member. Subject or subjects must be approved by assigned faculty member.
Prerequisite: Criminal Justice major only and consent of criminal justice coordinator

CRJ 229 Juvenile Delinquency (3-0) 3 hours
Study of the social and legal ramifications of youth problems, organization, jurisdiction, functioning of the juvenile court, police, and related agencies.
Prerequisite: ENG 105 and ENG 107; or equivalent.

DATA PROCESSING (DPR)

Business Division, Room A142, Ext. 2515

DPR 111 Introduction to Data Processing (3-0) 3 hours
Explains the significance and role of the computer in society and in business. Introductory concepts of computer hardware, software, and operations are presented. Writing simple programs in BASIC and an introduction to microcomputer applications are included. Note: This course is for non-data processing majors.
Prerequisite: MTH 101 and CSS 103, or equivalent.
Course fee

DPR 113 COBOL I (3-2) 4 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: DPR 170
Course fee

DPR 114 Elements of 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: DPR 113 and BUS 121

DPR 117 COBOL II (3-2) 4 hours

Continuation of COBOL I. Students write programs that sort files, maintain sequential and VSAM files. Emphasis is on efficient, concise coding. Includes the use of subprograms, dump reading and IDCAMS. Production programming is stressed and a major project may be assigned based on a current business application.

Prerequisite: DPR 113

Course fee

DPR 118 Computer Operations (2-2) 3 hours

Through hands-on operating experience, students learn to operate a modern computer. Communication with the operating system, understanding of peripheral equipment, and job control is stressed.

Prerequisite: DPR 170 or equivalent.

Course fee

DPR 170 Fundamentals for Data Processing (3-2) 4 hours

Comprehensive study of the functions of data processing in business and the capabilities of data processing equipment. Students gain sufficient skill in flowcharting techniques, programming logic, and the technical aspects of the computer to enable them to succeed in additional DPR courses.

Prerequisite: ENG 107 and MTH 102; or equivalent.

Course fee

DPR 171 Business Programming/BASIC (1-0) 1 hour

An introduction to coding computer programs in the BASIC language (Beginners All-Purpose Symbolic Instruction Code). Students will define business problems, plan the solution, code, and run programs using a microcomputer system.

Prerequisite: ENG 107 and MTH 102; or equivalent.

Course fee

DPR 173 Interactive Programming/BASIC (2-2) 3 hours

Elementary through advanced BASIC language concepts reinforced with business application coding projects. Emphasis on menu-driven processes, modular programming and "user friendliness." Sequential and random file techniques using operating system commonly found in business mini-micro environments.

Prerequisite: DPR 111 or DPR 170

Course fee

DPR 175 Business Computer Applications (2-2) 3 hours

A survey of several types of software available for business computer use. Students apply their knowledge of business information needs to the use of word processing, database management and spreadsheet software packages. They also become familiar with DOS and the IBM PC or compatible.

Prerequisite: ENG 107 and MTH 102; or equivalent.

Course fee

DPR 178 Managing Microcomputer Systems (3-0) 3 hours

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.

Prerequisites: DPR 175 and DPR 170 or DPR 226

DPR 179 Introduction to Local Area Network (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: DPR 170 or DPR 226 and DPR 292

DPR 190 Introduction to the IBM PC and PC-DOS (1-0) 1 hour

Covers the essential elements of DOS commands, file and directory structures, file editing, AUTOEXEC.BAT file commands, and system configurations applicable to floppy and fixed disks. Laboratory practice projects will frequently be done outside of class time.

Prerequisite: ENG 107 and MTH 102; or equivalent.

Course fee

DPR 191 Introduction to Windows (1-0) 4 hours

An introduction to the capabilities of Microsoft Windows. Students learn to use this graphics software to run multiple applications and to transfer information between applications. Additional short lessons teach specific skills in print management, file management, paintbrush, customizing the desktop, adding and deleting programs, and running non-Windows applications. (Formerly a DPR 299 topic.)

Prerequisite: DPR 190

Course fee

DPR 192 Introduction to dBASE IV (1-0) 1 hour

Covers dBASE IV commands from a user's perspective. Emphasis on report writing, file creation and modification, and techniques commonly used in an office environment. Laboratory practice projects will be done outside of class time.

Prerequisite: DPR 190

Course fee

Data Processing (DPR)

DPR 193 Programming in dBASE IV (1-0) 1 hour
The full capabilities of dBASE IV will be explored using the built-in, structured programming language. Essential language elements and functions will be used in conjunction with dBASE IV procedures, interactive coding techniques and structured programming principles. Laboratory practice projects will be done outside of class time.
Prerequisite: DPR 192 or DPR 175
Course fee

DPR 194 Word Processing for Data Processing Application (1-0) 1 hour
This course meets the needs of data processing students in the preparation of documentation for programs and applications. Through the use of word processing software, students will create, format and edit documents. Lab time outside of class will be required to complete projects. (Formerly a DPR 299 topic.)
Prerequisite: DPR 190
Course fee

DPR 195 Introduction to Lotus 1-2-3 (1-0) 1 hour
An overview of the capabilities of 1-2-3 and the following basic spreadsheet features: building a basic 1-2-3 spreadsheet, saving and retrieving reports, cell references, text and numeric formatting, recalculation, basic report features, and an overview of worksheet and range commands will be studied. Laboratory projects will be done outside of class time.
Prerequisites: DPR 190
Course fee

DPR 196 Intermediate Lotus 1-2-3 (1-0) 1 hour
Covers the data base and graphics capabilities of Lotus 1-2-3. Database concepts and definitions will be studied. The searching (query) and report capabilities will also be covered. Graphic capabilities including creating, viewing graphs on the CRT, saving graphs, and the printing of graphs will be studied. Laboratory practice projects will be done outside of class.
Prerequisite: DPR 195 or DPR 175
Course fee

DPR 197 Introduction to Microsoft Excel (1-0) 1 hour
An overview of the capabilities of the Excel spreadsheet package within the Windows graphical user interface environment. The course will be taught on PS/2 computers with heavy use of a mouse device. Spreadsheet formulas, functions and charting will be emphasized. Data tables and arrays will be introduced. Import and export features unique to LOTUS 1-2-3 and dBASE also will be explored. (Formerly a DPR 299 topic.)
Prerequisite: DPR 195 or equivalent
Course fee

DPR 212 Assembly Language (2-2) 3 hours
An introduction to coding Basic Assembler Language programs. Students will define business problems, plan the solution, code, assemble, and test programs on the IBM 4381 Processor using the Disk Operating System/Virtual Storage Extended (VOS/VSE).
Prerequisite: DPR 170
Course fee

DPR 213 Report Program Generator (2-2) 3 hours
Provides instruction in the use of Report Program Generators. Students will write programs in RPG for a variety of report writing tasks using disk input files and printed output.
Prerequisite: DPR 170
Course fee

DPR 214 Operating Systems (2-2) 3 hours
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: DPR 212

DPR 215 Advanced RPG II (2-2) 3 hours
Intended to enhance and expand the student knowledge and technical competency in RPG II through lecture and project assignments. This course will be an elective in the Associate of Applied Science Degree in Data Processing.
Prerequisite: DPR 213
Course fee

DPR 226 Introduction to Business Computer Systems (2.5-1) 3 hours
A course for students planning to transfer to a four year institution. Computer equipment, systems analysis and applications are surveyed. Students learn the operation of business applications software for data analysis and communications. This course cannot be used by DPR majors to fulfill a Data Processing Program elective.
Prerequisite: ENG 105 and ENG 107 or equivalent and MTH 108 or MTH 120 or two (2) years of high school algebra
Course fee

DPR 272 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: DPR 114

DPR 274 Introduction to "C" (3-0) 3 hours
An introduction to the fundamentals of the "C" programming language. Emphasis is on the design, coding and debugging of "C" programs in an interactive microcomputer environment using PC/DOS. Includes the creation of complex data formats, program input and output, and saving of information files. Structured programming techniques and "C" language style conventions will be emphasized.
Prerequisite: Programming experience with a microcomputer language (e.g., BASIC, Pascal, COBOL, FORTRAN) in an interactive environment
Course fee

DPR 275 On-Line Programming (2-2) 3 hours
Main emphasis will be on CICS and the techniques used for successful on-line systems. This course will be an elective in the Associate of Applied Science Degree in Data Processing.
Prerequisite: DPR 113
Course fee

Data Processing (DPR) Drafting (DFT)

DPR 276 Database Concepts (2-2) 3 hours

Intended as an introduction to data base management with an emphasis on the concepts of data base; actual programs will be written to explore these inter-relationships. This course will be an elective in the Associate of Applied Science Degree in Data Processing.

Prerequisite: DPR 175 and a programming language
Course fee

DPR 278 Desktop Publishing I (2-0) 2 hours

An introduction to desktop publishing using a microcomputer. Students become familiar with basic terminology and learn to create and import text files, create and import graphics, and produce simulated business publishing projects. Principles of design are included. Assignments will be completed using IBM PS/2 computers, a laser printer, Aldus PageMaker, and Microsoft Windows. Lab time outside of class is required.

Prerequisite: Knowledge of PC/MS-DOS or Macintosh operating system windows and a word processor.
Course fee

DPR 279 Business Graphics (1-0) 1 hour

An introduction to business graphics utilizing Harvard Graphics for Windows. Students learn the skills necessary to produce business presentations by creating, modifying, and enhancing various types of charts. (Formerly a DPR 299 topic.)

Prerequisite: DPR 191
Course fee

DPR 290 Advanced MS/PC DOS (1-0) 1 hour

This course is an extension of DPR 190 and is intended for those students who need to become more proficient in the important but less often used DOS commands.

Prerequisite: DPR 190
Course fee

DPR 291 Advanced dBASE IV (1-0) 1 hour

A continuation of DPR 193. Designed for those specializing in dBASE. Covers optimum database design techniques, large file problems, programming efficiencies, external calls and application generators. Conversion from dBASE III to dBASE IV, dBASE compilers, and third party support software will be analyzed. Laboratory practice projects will be done outside of class time. (Formerly a DPR 299 topic.)

Prerequisite: DPR 193
Course fee

DPR 292 Teleprocessing and the PC (1-0) 1 hour

Covers the basics of teleprocessing and provides a comprehensive view of Local Area Networks, PC/mainframe linking, and telecommunications software currently on the market. The implementation of off-the-shelf solutions using existing software and hardware will be emphasized.

Prerequisite: DPR 190
Course fee

DPR 295 Advanced Lotus 1-2-3 (1-0) 1 hour

Covers the advanced features of Lotus 1-2-3. Review of formulas, order of precedence, and cell references will be covered. The use of name assignments, formulas, data tables, and macro commands will be studied. Laboratory practice projects will be done outside of class.

Prerequisite: DPR 196
Course fee

DPR 299 Special Topics in Data Processing (Variable) 1-4 hours

A course designed to meet the needs of students for specialized instruction in current data processing topics. Topics will be identified for each section of the course. Repeatable 3 times or up to 4 hours.

Prerequisite: Would depend upon the selected topic
Course fee

DRAFTING (DFT)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

DFT 110 Mechanical Blueprint Reading (3-0) 3 hours

An introductory but comprehensive course which will cover the principles of blueprint interpretation, terminology, and symbols. Attention will be given to electrical, welding and machine prints.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

DFT 111 Drafting I (3-5) 5 hours

Tools and techniques of the drafting profession. Drafting skills are learned through intensive classroom practice. Topics covered are: geometric constructions, multiviews, sections, dimensioning and tolerancing, along with pictorial drawings. Student must furnish basic required equipment.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

DFT 112 Drafting II (3-5) 5 hours

Continuation of Drafting I. Emphasis is on auxiliary views, developments, working drawings, and descriptive geometry. Students must furnish basic required equipment.

Prerequisite: DFT 111 or EGR 121

Course fee

Drafting (DFT) Economics (ECO) Education (EDU)

DFT 113 Technical Illustration (2-2) 3 hours

Study of illustration techniques relating to axonometric, oblique, and perspective projection. Various methods and techniques of shading utilizing a variety of media. Student must furnish basic required equipment.

Prerequisite: One semester of graphics or drafting

Course fee

DFT 115 Model Making I (1-3) 2 hours

Familiarizes the student with skills involved in constructing scale mechanical, architectural and landscape models for the purpose of illustrating design, construction, function and appearance. Student must furnish required equipment.

Prerequisite: DFT 111 or EGR 121

Course fee

DFT 116 Model Making II (1-3) 2 hours

Continuation of Model Making I with emphasis placed on providing practical learning experiences in individual student specialty areas. Student must furnish basic required equipment.

Prerequisite: DFT 115

Course fee

DFT 117 Machine Sketching and Drafting (2-2) 3 hours

Familiarizes the student with standard sketching procedures as an introduction to basic drafting techniques. Course primarily intended for machine trades, maintenance, and industrial skills students with little or no drafting experience.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

ECO 222 Principles of Economics II (3-0) 3 hours

Surveys basic concepts with emphasis on microeconomic analysis. Problems of resource allocation in market economics such as U.S., and current economic problems such as pollution, poverty, and monopoly powers.

Prerequisite: ECO 221

ECO 223 Money and Banking (3-0) 3 hours

The economic and monetary theory of money and banking in the U.S. Includes a discussion of the impact of monetary policy decisions upon the aggregate economy using macroeconomic analysis.

Prerequisite: ECO 221

ECO 224 Public Finance (3-0) 3 hours

Study of the economic functions of government in a capitalist 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 relationships between monetary policy and debt management.

Prerequisite: ECO 221

ECO 225 Comparative Economic Systems (3-0) 3 hours

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.

Prerequisite: ECO 221

ECONOMICS (ECO)

Social Science Division, Room A243, Ext. 2532

ECO 110 Economics for Business and Industry (3-0) 3 hours

Surveys fundamental microeconomic and macroeconomic principles to provide the student with the basic tools to analyze current economic problems and policies. For majors in business and technical career fields. Recommended for career curriculum students.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

ECO 221 Principles of Economics I (3-0) 3 hours

Surveys basic economic concepts with emphasis on macroeconomic analysis and fiscal and monetary policies. Current economic problems such as inflation and unemployment, their causes and cures, are studied.

Prerequisite: ENG 105, ENG 107 and MTH 102; or equivalent.

EDUCATION (EDU)

Social Science Division, Room A243, Ext. 2532

EDU 221 Introduction to Teaching (3-0) 3 hours

Orientation to profession and study of nature of teaching, its opportunities and responsibilities. Scope of American public education studied.

Prerequisite: ENG 105 and ENG 107; or equivalent.

EDUCATIONAL WORK EXPERIENCE (EWE)

See Cooperative Education page 114.

ELECTRICAL TECHNOLOGY (ELC)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

ELC 110 Applied Electric Circuit Theory (3-2) 4 hours

An introductory course in maintenance electricity covering both AC and DC circuitry. Topics will include OHM's law, series parallel circuits, power dissipation and mathematics as required.

Corequisite: MTH 114 or MTH 117

ELC 111 Electrical Circuits I (3-2) 4 hours

DC circuitry including fundamental considerations such as static electricity, resistance, power, network theorems and solutions, introduction to network solutions and magnetism.

Prerequisite: MTH 117 or MTH 122

ELC 112 Electrical Circuits II (3-2) 4 hours

AC circuitry including fundamental sine wave analysis, inductance, capacitance, voltage and current phase relationships in AC circuits. AC problem solving, complex notation, applications.

Corequisite: ELC 111 and MTH 118 or MTH 123

Course fee

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.

Corequisite: ELC 110



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.

Prerequisite: ELC 110

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 relay ladder logic and Boolean functions. Troubleshooting systems with PLC's will also be studied.

Prerequisite: ELC 110 or approved industry experience

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.

Prerequisite: ELC 110 or ELC 111 or ELC 112

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.

Prerequisite: None

ELECTRONICS ENGINEERING TECHNOLOGY (ELT)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

ELT 111 Electronic Drafting (1-3) 2 hours

Drawing of electronic components and wiring diagrams, with emphasis on national standards and codes.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

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. Some degree of mathematical proficiency is required for students to follow analysis.

Prerequisite: ELC 112

Course fee

Electronics Engineering Technology (ELT)

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.

Prerequisite: Sophomore standing or consent of division
Course fee

ELT 116 Technical Programming (3-0) 3 hours

This course will be taught using Pascal as the programming language. BASIC language will be introduced. Examples and programming problems will be drawn from the general body of technical problems.

Corequisite: MTH 117 or MTH 122
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 and software technology.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.
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.

Prerequisite: ELC 110, ELT 117
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 the operation and troubleshooting of the electronics involved. Students will gain experience using instrumentation and measuring devices that simulate control situations.

Prerequisite: ELC 110
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.

Prerequisite: ELC 110
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.

Prerequisite: ELC 110, ELC 113
Course fee

ELT 175 Microprocessor Programming I (2-2) 3 hours

Assembly language programming of standard microprocessors and the A-80/8085 instruction set will be presented. Work will be conducted in the CPM environment with cross assemblers. A full description of CPM will be presented. Z-80 hardware will be discussed as it applies to the programming problems.

Prerequisite: MTH 117 or MTH 122 and ELT 116 or MCS 140
Course fee

ELT 176 Microprocessor Programming II (2-2) 3 hours

Continuation of ELT 175. Advanced programming techniques concentrating on overall program development. Single chip processor (8048) will be introduced along with the instruction set. Special programming as applied to machine control application, some special purpose application software, and macros will also be introduced.

Prerequisite: MTH 118 or MTH 123 or ELT 175
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.

Prerequisite: ELT 113
Course fee

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. Special communication equipment will be covered.

Prerequisite: ELT 113, ELC 112
Course fee

ELT 213 Introduction to Digital Electronics (3-2) 4 hours

Principles of operation, performance, and design of digital computers and digital instrumentation. Number systems including binary; Boolean algebra and application to digital logic; digital logic circuits; computer organization and operation; digital logic application to electronic instrumentation.

Prerequisite: MTH 117 or MTH 122
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.

Prerequisite: ELT 211 and MTH 211
Course fee

ELT 216 Microprocessors I (2-3) 3 hours

Introductory course in microprocessors dealing with hardware and software. The 8080/8085 devices studied. Hardware configuration including CPU, Memory, and I/O will be studied as well as the instruction set.

Prerequisite: ELT 213 and ELT 116

Course fee

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.

Prerequisite: ELT 216

Course fee

ELT 270 Microprocessor Programming III (2-2) 3 hours

Presents advanced subject areas in software and system development. A project will be required as part of the course requiring the student to take total system responsibility. The 8086 family instruction set will be introduced along with hardware concepts. Other 16 bit devices will be briefly described and telecommunication will be introduced.

Prerequisite: ELT 176

Course fee

ENGINEERING (EGR)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

EGR 102 Introduction to Engineering (3-0) 3 hours

Foundation course for those seeking professional goals and includes a survey of the engineering fields, associated 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.

Prerequisite: MTH 102

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 acting on members of frames, trusses, etc; forces due to friction and properties of areas.

Prerequisite: MTH 117 and PHY 111

EGR 121 Engineering Graphics (2-3) 3 hours

Graphic language used by engineers, designers, and drafters to communicate industrial ideas. A mechanical drawing course covering topics such as sketching, use of instruments, geometric constructions, orthographic drawing, pictorial drawing, and introduction to descriptive geometry. Includes an introduction to the use of CAD.

Prerequisite: High school geometry or drafting or DFT 117 or DFT 110

Course fee

EGR 122 Descriptive Geometry (2-3) 3 hours

Graphic representation and solution of space problems involving points, lines, planes, intersections, revolutions and developments. Student must furnish basic required equipment.

Prerequisite: EGR 121

Course fee

EGR 215 Mechanics of Materials (2-2) 3 hours

Mechanical and physical properties of materials appropriate to the design of structures. Analysis and design of structural joints, torsional shafts, beams and columns. Analysis of structures with combined loading.

Prerequisite: EGR 115

Course fee

EGR 221 Statics and Dynamics (5-0) 5 hours

Vector mechanics for pre-engineering students including statics with analysis of 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. Offered spring only.

Prerequisite: PHY 123

Corequisite: MTH 246

EGR 222 Engineering Mechanics of Deformable Bodies (3-0) 3 hours

An engineering study of the elementary mechanics of deformable bodies. 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 influence of the properties of materials. Offered summer only.

Prerequisite: EGR 221

EGR 260 Introduction to Circuit Analysis (4-0) 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. This course will also cover three phase circuits and transformers. Operational amplifiers are introduced. Offered spring only.

Prerequisite: MTH 246, PHY 124

ENGLISH (ENG)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

**ENG 090 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.

Prerequisites: Successful completion of ESL 082 and ESL 083 (Intensive Intermediate Academic ESL). Appropriate score on ESL placement tests and/or consent of instructor

**ENG 091 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.

Prerequisites: Successful completion of ENG 090 and/or consent of instructor

**ENG 092 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 college 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.

Prerequisites: Successful completion of ENG 091 and/or consent of instructor

**ENG 093 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.

Prerequisites: Successful completion of ENG 092 and/or consent of instructor

**ENG 094 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.

Prerequisites: Successful completion of ENG 093 and/or consent of instructor

**ENG 095 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, note-taking of academic lectures and of academic readings and writing short papers based on readings and lectures.

Prerequisites: Successful completion of ENG 094 and/or consent of instructor

**ENG 096 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.

Prerequisites: Successful completion of ENG 095 and/or consent of instructor

ENG 102 Spelling (1-0) 1 hour

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 program.

Prerequisite: Basic Skills Assessment

ENG 103 Vocabulary Development (1-0) 1 hour

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 program.

Prerequisite: Basic Skills Assessment

ENG 104 Punctuation and Sentence Structure (1-0) 1 hour

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 program.

Prerequisite: Basic Skills Assessment

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 program.

Prerequisite: Basic Skills Assessment

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 program.

Prerequisite: Basic Skills Assessment

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. The course concentrates on vocabulary development, dictionary skills, skimming/scanning, and paragraph analysis. Note: This course does not apply to any associate degree or career certificate program.

Prerequisite: Basic Skills Assessment

ENG 113 Technical Communication Practicum (3-0) 3 hours

Provides work simulation experience in a variety of report 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 and consent of instructor

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: ENG 105 and ENG 107; or equivalent.

ENG 121 English Composition I (3-0) 3 hours

English Composition I develops students' skills in written expression and analytical reading. During the course, students will write various types of exposition and read, analyze and discuss essays.

Prerequisite: ENG 105 and ENG 107; or equivalent.

ENG 122 English Composition II (3-0) 3 hours

Teaches students to analyze, discuss, criticize, and appreciate fiction, poetry, and drama. Students will write criticism of the literature they read and prepare a research paper.

Prerequisite: ENG 120 or ENG 121

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: ENG 105, ENG 107 and MTH 102; or equivalent.

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: ENG 105, ENG 107 and MTH 102; or equivalent.

ENG 126 Advanced Composition: Scientific and Technical Communications (3-0) 3 hours

Specifically designed for students pursuing A.A.S. or A.S. degrees, this is a transferable course in report writing for the business, industry, and scientific communities. Students are guided in data collection (research) techniques, presentation of data in formal report formats and use of accepted documentation standards. Effective professional writing principles are covered including conciseness, objectivity, precision and clarity of expression as well as effective formatting and use of graphics. Writing experiences include laboratory reports, periodic reports, technical (procedural and operational) manuals, feasibility studies and proposals.

Prerequisite: ENG 120 or ENG 121

English (ENG)

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 interrelationship 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.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

ENG 129 Women in Literature (3-0) 3 hours

Introduces students to the wealth of literature by and about women. Discussions, films, and records enable 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 women.

Prerequisite: ENG 120 or ENG 121

ENG 220 Introduction to Scriptwriting-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. Videotapes 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

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.

Prerequisite: ENG 222

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

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

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

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

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

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

ENG 243 Introduction to Fiction (3-0) 3 hours

Introduces 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

ENG 244 Mythology and Fairy Tales (3-0) 3 hours

Students study mythology and fairy tales from various cultures, with the emphasis placed on Greek myths, Norse myths and Grimms' fairy tales. The lasting power and influence of myths and fairy tales and their literary, social and psychological applications are discussed. Lectures, movies, songs and in-class projects will supplement the discussions and textbook reading assignments.
Prerequisite: ENG 120 or ENG 121

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

ENGLISH AS A SECOND LANGUAGE (ESL)

Adult Continuing Education and Extension Services
Division, Building 4, Ext. 3635

ENGLISH AS A SECOND LANGUAGE (ESL) classes are offered to adults from all countries whose native language is not English to pursue language instruction.

Students enrolling in college level instruction and students entering the college on F1 visas are not eligible for tuition free adult education classes.

The adult education program is funded in part by grants totaling \$290,376 from the federal government. This represents 34% of the total cost of the program.

ESL 040 Beginning ESL I (Variable) 1-3 hours

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.
Prerequisite: ESL Placement Exam

ESL 041 Beginning ESL II (3-0) 3 hours

This course, a continuation of Beginning ESL I, 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.
Prerequisite: ESL Placement Exam

ESL 042 Beginning ESL III (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, nationalities and languages, and why/because questions. They will concentrate on listening and speaking skills, with additional work on reading and writing.
Prerequisite: ESL Placement Exam

ESL 043 Beginning ESL IV (3-0) 3 hours

This course, a continuation of Beginning ESL III, 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, time problems and giving excuses. Listening and speaking will be stressed with additional work on reading and writing.
Prerequisite: ESL Placement Exam

ESL 044 ESL - Writing Improvement I (3-0) 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.
Prerequisite: ESL Placement Exam

ESL 045 ESL - Conversation I (3-0) 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.
Prerequisite: ESL Placement Exam

ESL 050 Intermediate ESL 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 with 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
Prerequisite: ESL Placement Exam

English as a Second Language (ESL)

ESL 051 Intermediate ESL 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, renting and buying, and giving compliments.

Prerequisite: ESL Placement Exam

ESL 052 Intermediate ESL 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.

Prerequisite: ESL Placement Exam

ESL 053 Intermediate ESL 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.

Prerequisite: ESL Placement Exam

ESL 054 ESL-Writing Improvement II (3-0) 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.

Prerequisite: ESL Placement Exam

ESL 055 ESL-Conversation II (3-0) 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.

Prerequisite: ESL Placement Exam

ESL 060 Advanced ESL 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 skill 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, more specific vocabulary. They will become familiar with American slang, idioms and cultural patterns.

Prerequisite: ESL Placement Exam

ESL 061 Advanced ESL II (3-0) 3 hours

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.

Prerequisite: ESL Placement Exam

ESL 062 Advanced ESL 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.

Prerequisite: ESL Placement Exam

ESL 063 Advanced ESL 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, learning to recognize prefixes and suffixes. They will work in reading on identifying main ideas and supporting details.

Prerequisite: ESL Placement Exam

ESL 070 ESL 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.

Prerequisite: ESL Placement Exam

ESL 071 ESL 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.

Prerequisite: ESL Placement Exam

ESL 072 ESL 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.

Prerequisite: ESL Placement Exam

ESL 073 ESL 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.

Prerequisite: ESL Placement Exam

ESL 080 ESL Academic Purposes Intermediate I (3-0) 3 hours

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 on directions and sequencing in academic contexts.

Prerequisite: ESL Placement Exam

ESL 081 ESL Academic Purposes Intermediate II (3-0) 3 hours

Second 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 introduced in ESL for Academic Purposes - Intermediate I. Emphasis on series of directions and sequencing in academic contexts.

Prerequisite: ESL 050 or ESL Placement Exam

ESL 082 ESL Academic Purposes Intermediate III (3-0) 3 hours

Third 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 on American life and college academic culture.

Prerequisite: ESL 051 or ESL Placement Exam

ESL 083 ESL Academic Purposes Intermediate IV (3-0) 3 hours

Fourth 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 chosen in ESL for Academic Purposes - Intermediate III. Emphasis on expressing comparisons.

Prerequisite: ESL 052 or ESL Placement Exam

FIRE SCIENCE TECHNOLOGY (FST)

Engineering, Math, Physical Sciences Division, Room B162, Ext. 2498

FST 111 Introduction to the 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, under water 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. (Individuals with greater than one year firefighter experience are not eligible for credit.)

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

FST 116 Fire Fighting Tactics & 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 ground operations, pre-fire planning, and basic engine and truck company operations. Recognized by the Office of the State Fire Marshal towards Fire Officer 1/Tactics & Strategy 1.

Prerequisite: None

FST 117 Fire Fighting Tactics & Strategies II (3-0) 3 hours *

Advances principle & methods associated with the fireground strategies and tactics required of the company officers and chief officers. The course emphasizes multi-company alarm assignments, sectorization of the fireground, handling disasters and major fire incidents. Recognized by the Office of the State Fire Marshal towards Fire Officer 2/Tactics & 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, under water rescue and medical scene management will be reviewed.

Prerequisite: None

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. The subject covers: preventative 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.

Prerequisite: None

Fire Science Technology (FST)

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 proper method of writing lesson plans. Specifics included in this course are: The instructor's role and responsibilities, oral communication, concepts of learning, instructional material, organizing the learning environment, testing and evaluation, and records and reports. Recognized by the Office of the State Fire Marshal towards Instructor 1/Officer 1.

Prerequisite: None

FST 174 Fire Instructor II (3-0) 3 hours *

This course is a continuation of FST 173. Teaches advance 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. material 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 & causes, inspection techniques and investigations. Recognized by the Office of the State Fire Marshal towards Fire Officer 1/Fire Prevention Principles 1.

Prerequisite: None

**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 Operations, of the State Fire Marshal Certification and OSHA 29 CFR 1910.

Prerequisite: None

FST 214 Fire Prevention Principles II (3-0) 3 hours *

Advances principles and methods associated with the individuals who have responsibilities in code enforcement. This course is designed to improve the professional development of individuals involved in fire inspections with regards to prevention systems, water supply, public education, plan review, pre-fire planning and evacuation planning. Recognized by the Office of the State Fire Marshal towards Fire Officer 2/Fire Prevention Principles 2.

Prerequisite: FST 177

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 Marshal towards Fire Officer 1/Management 2.

Prerequisite: FST 218 and/or at least 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.

Prerequisite: None

**FST 273 Fire Science Business
& 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 towards Fire Officer 2/Management 3.

Prerequisite: FST 217 and/or at least two years active experience in the fire service.

FST 274 Fire Administration & 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 towards Fire Officer 2/Management 4.

Prerequisite: FST 273 and/or at 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 or current interest and cover that subject in depth. Since topics will vary widely from year to year, a student may seek approval to repeat this course once for credit.

Prerequisite: None

* The Office of the State Marshal requires that additional criteria be met prior to state certification. Check with your program coordinator for guidance.

FLUID POWER TECHNOLOGY (FLU)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

FLU 110 Pneumatic Power Systems (2-2) 3 hours

Principles of fluid power technology using air or gas as the transfer media. Basic principles are introduced. Complete pneumatic systems are studied including power sources, compressors, lines, valves and actuators.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

FLU 111 Hydraulic Power Systems (2-2) 3 hours

Fluid power technology using liquid as the transfer media. Complete hydraulic systems are studied including power sources, reservoirs, pumps, lines, valves, and actuators.

Prerequisite: One year of high school algebra, or MTH 102

Course fee

FOOD SERVICE (FSM)

Business Division, Room A142, Ext. 2515

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. It focuses on the role and responsibilities of food service personnel and analyzes trends within the industry.

Prerequisite: CSS 103 and MTH 101; or equivalent.

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.

Prerequisite: CSS 103 and MTH 101; or equivalent.

Course fee

FSM 112 Culinary Arts I (1-4) 3 hours

Professional introduction to a full service kitchen and the uses of tools, materials, and equipment. Preparation and presentation of food. Combination of salads, soups, appetizers, sauces, entrees, vegetables, starches, and desserts.

Corequisite: FSM 111

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.

Prerequisite: CSS 103

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. Emphasizes the importance of professional kitchen management.

Prerequisite:

Course fee

FSM 171 Culinary Arts II (1-4) 3 hours

A required course for students in the Culinary Arts Option. This course provides expanded experience in the handling of tools, materials, and the operation of equipment. Each student has the opportunity to prepare an assortment of foods which are being used in the Willow Room. This way we see firsthand consumer reaction of wholesomeness, style, and the importance of garnishing the final product.

Corequisite: 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.

Prerequisite: CSS 103 and MTH 101; or equivalent.

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: ENG 105 and MTH 101; or equivalent.

FSM 213 Quantity Food Purchasing (3-0) 3 hours

Principles and procedures of quantity purchasing including development of standards, cost controls, budgeting, and records keeping systems for food, beverages, equipment, and supplies. Vendor relations, legal factors, and storage requirements are included.

Prerequisite: FSM 110

Course fee

Food Service Management (FSM) French (FRN) General Education Development (GED)

FSM 271 Food Service Management (2-4) 4 hours

This course is the capstone for the Food Service Management option. Students demonstrate proficiency in managing a food service operation by applying concepts and skills in purchasing, merchandising, personnel supervision, management controls and team development.

Prerequisite: Fourth semester standing in the Food Service program.

Course fee

FSM 273 Food, Beverage and Labor Control (3-0) 3 hours

Principles and practices of costing for food, beverage, and labor including analysis methods and problem resolution. Introduction to wine and spirits classification and marketing.

Prerequisite: FSM 110, FSM 111 and ACC 112

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. Topics will be identified for each section of the course. Repeatable 3 times or up to 8 hours.

Prerequisite: Depends on the selected topic.

FRENCH (FRN)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

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: ENG 105 and ENG 107; or equivalent.

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 or two years of high school French

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

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

FRN 224 French Civilization II (3-0) 3 hours

Composition and conversation based on contemporary writings emphasizing the social, political, economic and literary trends of modern France. A continuation of FRN 223.

Prerequisite: FRN 223

GENERAL EDUCATION DEVELOPMENT (GED)

Adult Continuing Education and Extension Services
Division, Building 4, Ext. 3635

G.E.D. PREPARATION (GED) classes prepare students to take the high school equivalency exam.

Students enrolling in college level instruction and students entering the college on F1 visas are not eligible for tuition free adult education classes.

The adult education program is funded in part by grants totaling \$290,376 from the federal government. This represents 34% of the total cost of the program.

GED 006 G.E.D. Preparation I (3-0) 3 hours

Preparation for those who want to take the General Educational Development Examination (G.E.D.) to earn their high school equivalency certificate. For adults who have not completed high school. Students under age 19 should call 223-3613 for GED test information. This class is offered in English and in Spanish.

Prerequisite: Reading above 8.9 level on TABE

GED 007 G.E.D. Preparation II (3-0) 3 hours

A continuation of G.E.D. Preparation I (ADE 006) for those who need further instruction before attempting the General Education Development Examination (G.E.D.) to earn their high school equivalency certificate. For adults who have not completed high school.

Prerequisite: GED 006

GEOGRAPHY (GEG)

Social Science Division, Room A243, Ext. 532

GEG 121 Physical Geography (3-0) 3 hours

Introduction to principles of physical geography; study of earth and its atmosphere, hydrosphere and lithosphere.

Emphasis on earth's land forms, weather, climates, vegetation and soils. Note: This course receives non-lab physical science credit.

Prerequisite: ENG 105, ENG 107 and MTH 102; or equivalent.

GEG 122 Cultural Geography (3-0) 3 hours

An introductory study of man's spatial arrangements and interrelationships that produce the diversity of the world's cultural landscape. Topics include population, migration, health, nutrition, culture, language, religion, settlements, cities, industry, agriculture, state systems, and expansion.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

GEG 123 World Regional Geography (3-0) 3 hours

Introductory survey of basic concepts of regional geography. Spatial relationships between elements of natural environment and man analyzed to determine problems, potentialities, and world importance of each region. Cultural economic, environmental, land-use, and political patterns emphasized.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

GEOLOGY (GEO)

Engineering, Math, Physical Sciences Division, Room B134, Ext. 2498

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: ENG 105, ENG 107 and MTH 101; or equivalent.

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: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

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. 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; resources; and ecology.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

GEO 126 Geology of Illinois (2-0) 2 hours

A survey of the principal 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: ENG 105, ENG 107 and MTH 101; or equivalent.

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: ENG 105, ENG 107 and MTH 101; or equivalent.

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, shorelines, waste disposal, mineral resources, and the energy situation are all included.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

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. Travel expenses paid by student. May be taken four times.

Prerequisite: Physical ability to take extended and rigorous hikes, occasionally under difficult conditions.

Course fee

GERMAN (GER)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

**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. This is the college level course.

Prerequisite: ENG 105 and ENG 107; or equivalent.

**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 Beginning Conversational German I.

Prerequisite: GER 121 or equivalent

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 or equivalent

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 or equivalent

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

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

**HEALTH INFORMATION
TECHNOLOGY (HIT)**

Biological & Health Sciences Division, Room
C140, Ext. 2445

HIT 111 Medical Terminology (3-0) 3 hours

Study of terms related to medical science, hospital services, medical specialties including pathology and radiology, and abbreviations used in medicine. Includes spelling and pronunciation.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HIT 112 Survey of Health Care (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: ENG 105, ENG 107 and MTH 102; or equivalent.

**HIT 113 Ethical and Legal Aspects of
Medical Records (3-0) 3 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: HIT 112 and HIT 115 and admission to HIT program

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: BSS 128 or 35 wpm

Corequisite: HIT 111

Course fee



HIT 115 Health Information Systems (2-4) 4 hours

Introduction to current methodologies concerning office automation technologies. Orientation to the medical record department and study of the medical record format, content and analysis. Indexing and filing systems are also included.
Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

HIT 116 Advanced Medical Transcription (0-6) 3 hours

This course 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.

Prerequisite: HIT 114

Course fee

HIT 211 Coding (3-4) 5 hours

Coding with ICD and CPT classification systems. Emphasis on coding quality and the reimbursement impact of coding.

Prerequisite: HIT 113, HIT 114

Course fee

HIT 212 Clinical Practice in Health Information I (1-15) 4 hours

The first of a two-semester sequence of supervised clinical experience in health facilities. (The student will be responsible for his/her transportation to and from the health facility).

Corequisite: HIT 211

Course fee

HIT 213 Clinical Practice in Health Information II (1-15) 4 hours

Supervised clinical experience in various areas pertaining to medical records. (The student will be responsible for his/her transportation to and from the health facility.)

Prerequisite: HIT 212

Corequisite: HIT 214 and HIT 216

Course fee

HIT 214 Management Health Information Technician (2-0) 2 hours

The basic principles of management and supervision as applied to medical record administration.

Prerequisite: HIT 211

HIT 215 Pathophysiology (3-0) 3 hours

Current theories of disease processes which will assist the student in interpreting information within the medical record.

Prerequisite: BIO 124

HIT 216 Evaluating and Reporting Health Care Data (3-2) 4 hours

Current methods of quality assessment, utilization management and risk management. Collecting and reporting medical statistical data using manual and automated methods including the tumor registry is included.

Prerequisite: HIT 211

Course fee

HISTORY (HST)

Social Science Division, Room A243, Ext. 2532

HST 121 History of Western Civilization I (3-0) 3 hours

Survey of past civilizations starting with Sumer, Egypt, Greece and Rome, and western development of Age of Enlightenment. Attention given to trends and patterns in history so student can evaluate development of modern civilization and prepare for challenges of tomorrow.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 122 History of Western Civilization II (3-0) 3 hours

Modern institutions, values, philosophy, and culture in the Western World from enlightenment and French Revolution, through dominance of Europe in 18th and 19th Centuries, and culminating in the 20th Century, adaptations of Atlantic community to opposing ideologies with a look at the Third World.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 123 Modern Europe I (1750-1901) (3-0) 3 hours

Values, institutions, ideas and events that shaped contemporary world society from background and causes of French Revolution to end of Victorian Age. Topics surveyed in depth are French Revolution, Napoleon, Congress of Vienna, Rise of Liberalism, Nationalism, Industrialism, and Socialism.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 124 Modern Europe II (1901 to Present) (3-0) 3 hours

20th Century developments, values and thought, and their world impact. Topics surveyed in depth are intellectual modernism, totalitarianism, world wars, ideologies in conflict, social revolutions and emergence of Third World.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 125 Modern Jewish History (3-0) 3 hours

Traces Jewish history from the period of the Enlightenment (1700's) to the present day, taking into account the Napoleonic period and Jewish emancipation; the status of Jews in Eastern, Central, and Western Europe from the 18th century to the present time; the development of Zionism; the Jews in America and the development of the Reform movement; and the creation and status of the State of Israel.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

History (HST) Horticulture (HRT)

HST 129 Women in History (3-0) 3 hours

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 as seen in primary sources and film.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 221 United States History to 1876 (3-0) 3 hours

Interpretative survey of political, constitutional, economic, and social history of United States 1492-1876, European background, colonies in eighteenth century, beginnings of national life, era of Jacksonian Democracy, slavery, Civil War and Reconstruction.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 222 United States History from 1876 (3-0) 3 hours

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, cold war, and post World War II problems of the American people.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 223 American Popular Culture (3-0) 3 hours

A survey of American history in the 20th century with emphasis on interaction between values, events, social history and popular culture, e.g., film, music, television, etc.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 224 The American Military Experience (3-0) 3 hours

A course providing an in-depth understanding and knowledge of the military, diplomatic, domestic, causation aspects of various American wars such as World War II, the Civil War, and Viet Nam.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 240 Afro-American History I (3-0) 3 hours

Includes survey of African origins of American blacks; role played in Colonial America; slavery and reconstruction; and Black American in the 20th Century. Emphasis on contributions of Afro-Americans to America's development.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HST 241 Afro-American History II (3-0) 3 hours

Includes role of Black American in America's development in 20th Century. Emphasis on contributions to America's development and problems encountered.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HORTICULTURE (HRT)

Biological & Health Sciences Division, Room C140, Ext. 2445

HRT 110 Grounds Maintenance (2-2) 3 hours

Designed for those interested in or presently working in the area of grounds care and maintenance. Areas of study include pruning, fertilizing and replacement of landscape plants, general turf care, and maintenance of equipment.

Prerequisite: CSS 103 and MTH 101; or equivalent.

Course fee

HRT 111 Basic Horticulture (3-0) 3 hours

Introduction to horticulture, including basic anatomy, terminology and functions of plants and professions surrounding culture and use of ornamental plants.

Prerequisite: ENG 107 and MTH 101; or equivalent.

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 the landscape and their outstanding characteristics.

Prerequisite: ENG 107 or equivalent.

Course fee

HRT 113 Shrub Identification (2-2) 3 hours

Identification of small trees, shrubs, vines, and ground covers by their common and botanic names.

Prerequisite: ENG 107 or equivalent.

Course fee

HRT 114 Soils, Fertilizer and Water (2-2) 3 hours

Study of plant nutrients and water as they relate to soils and plant growth. Biological, chemical and physical properties of artificial media and native soils are discussed. A basic knowledge of chemistry is helpful.

Corequisite: HRT 111

Course fee

HRT 116 Entomology (2-2) 3 hours

Study of the importance of insects to man. Topics include insect biology, principles of pest management, natural and applied insect control, insect pests of vegetables, fruit, and ornamental plants. Laboratory includes observation, identification and diagnosis of insect pests.

Prerequisite: ENG 107 or equivalent.

Course fee

HRT 118 Landscape Graphics (2-2) 3 hours

Landscape graphics is a course to teach fundamentals of freehand drawing through drafting procedures. Using various symbols and color, students will learn to express landscape ideas on paper to communicate to the client how the intended landscape will look.

Prerequisite: CSS 103 and MTH 101; or equivalent.

Course fee

HRT 119 Plant Pathology (2-2) 3 hours

Study of agents that cause plant disease and methods of disease control. Emphasis is placed on diseases common to horticultural crops in Illinois and North Central United States.

Corequisite: HRT 111

Course fee

HRT 170 Arboriculture (2-2) 3 hours

Designed for those people interested in the care and proper maintenance of trees. Students will be required to climb and prune trees using standard safety practices. Good physical health is required. HRT 112 may be helpful.

Prerequisite: CSS 103 and MTH 101; or equivalent.

Course fee

HRT 172 Interior Plant Maintenance (2-2) 3 hours

Interior Landscaping is a new fast growth industry. In this class we cover the design, installation and care of interior plantings. We begin with basics of plant identification, growth and development and propagation. Other topics covered are fertilization, soils and indoor climates, pests and diseases, and business operations.

Corequisite: HRT 111

Course fee

HRT 173 Perennial Flowers (2-2) 3 hours

Identification, care and maintenance of perennial and annual flowers hardy to our area. Field trips and outdoor labs are included.

Prerequisite: CSS 103

Course fee

HRT 174 Basic Floral Design (2-2) 3 hours

An introduction to 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.

Prerequisite: CSS 103

Course fee

HRT 175 Intermediate Floral Design (2-2) 3 hours

A continuation of basic floral design dealing with 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

Covers 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.

Prerequisite: CSS 103 and MTH 101; or equivalent.

Course fee

HRT 210 Greenhouse Crop Production (2-2) 3 hours

Covers the production of greenhouse crops and the cultural practices required for growth. Seeding, watering, fertilization, containers, growing medias, temperature control, insect and disease control will be covered. Bedding plants and pot crops will be grown throughout the semester.

Corequisite: HRT 111

Course fee

HRT 211 Introduction to Turfgrasses (2-2) 3 hours

First course in a two course sequence. Topics covered are turf grass identification, growth and development, fertilization, and environment and weed identification and control. HRT 110 and math computation skills are helpful.

Prerequisite: HRT 111

Course fee

HRT 212 Turf Culture (2-2) 3 hours

A study of the cultural practices used in proper turf management. Topics include insects and diseases of turf and their controls, irrigation systems, cultivation and fertilization programs.

Prerequisite: HRT 211

Course fee

HRT 213 Landscape Design (2-2) 3 hours

Basic concepts and principles of landscape design, application of these concepts to residential and commercial sites. Students will complete various types of designs during the course. HRT 112 and HRT 113 are recommended.

Prerequisite: HRT 118

Course fee

HRT 214 Landscape Construction (2-2) 3 hours

A course dealing with the installation of landscapes; organization, setting up and construction. Students will be assigned projects which 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

A computer landscape drafting course covering site planning and landscape design module aids in the creation of landscape design plans. Emphasis is placed on practical application of software and hardware to develop working drawings for the landscape industry.

Corequisite: HRT 118

HRT 217 Plant Propagation (2-2) 3 hours

Deals with the techniques and procedures involved with propagating plants. Sexual and asexual procedures are discussed along with environmental conditions needed to promote growth and development.

Corequisite: HRT 111

Course fee

Horticulture (HRT) Humanities (HUM)

HRT 276 Fieldwork (1-15) 3 hours
A special project set up by the student and program coordinator to cover a specific area of interest to the student.
Prerequisite: Sophomore standing in HRT program

HUMANITIES (HUM)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

HUM 121 Introduction to Humanities I (3-0) 3 hours
An interdisciplinary course that introduces students to the art, literature, music, and philosophy of ancient and medieval civilizations.
Prerequisite: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

HUM 123 Introduction to Film (3-0) 3 hours
Films are emotional experiences: we laugh, cry, worry and fear in a movie theatre. Learn how the filmmaker affects our emotional responses through camera movement, angles, lighting, and editing. Gain an historical perspective on film by watching samples from the Twenties through the Seventies and analyzing a few genre films, such as the western, the detective, the horror, the comedy or musical.
Prerequisite: ENG 105 and ENG 107; or equivalent.
Course fee

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. Travel expenses are paid for by the student. Credit would be arranged with instructor.
Prerequisite: ENG 105 and ENG 107; or equivalent.

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: ENG 105, ENG 107 and MTH 102; or equivalent.
Course fee

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: ENG 105 and ENG 107; or equivalent.
Course fee

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: ENG 105 and ENG 107; or equivalent.

HUM 221 American Decades (3-0) 3 hours
This course introduces students to the interdisciplinary study of American culture, its literature, music, art, and history. By focusing on a specific period of American life or by comparing two periods, students will develop skills in analyzing and synthesizing which they could apply to any culture. They will also develop a holistic picture of American life during the decades studied. The specific time period studied may vary from semester to semester, but the same methodologies will be applied.
Prerequisite: ENG 105 and ENG 107; or equivalent.

HUM 222 Film and Society (3-0) 3 hours
This course will examine the social, economic, and political pressures that have influenced film throughout its history. The course will also question the way in which movies have affected styles and attitudes in societies worldwide. Seven feature films will be shown.
Prerequisite: ENG 105 and ENG 107; or equivalent.
Course fee

HUM 225 The Art of Dance (3-0) 3 hours
This course introduces students to an interdisciplinary approach to the art of dance. Combining a 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: ENG 105, ENG 107 and MTH 102; or equivalent.
Course fee

**HUMAN SERVICES PROGRAM
(HUS and HUX)**

Social Science Division, Room A244, Ext. 2532

HUS 111 Health and Nutrition (3-0) 3 hours

A study of basic nutritional needs with an emphasis on the special needs of children, the elderly and the recovering person. Other major topics covered include: 1) principles of preventive and intervention techniques necessary to secure a quality health and nutrition condition; 2) health/safety needs of children, the elderly, and the ill; 3) the responsibility of agencies serving these groups to provide quality care based upon the aforementioned principles and needs.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

HUS 112 Community Social Service (3-0) 3 hours

An overview of the range of social services available to children, families, and individual adults. Private and public services are covered. Physical health services, counseling services, financial aid, and protective services are included.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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 students in the group.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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.

Prerequisite: ENG 105 and ENG 107; or equivalent.

**HUS 115 Music Activities for Young
Children (1-2) 2 hours**

Descriptive lecture and experiential rhythmic activities emphasize integrating music into the preschool program. Singing, listening, creative movement, and rhythm instruments are included.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

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

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: ENG 105 and ENG 107; or equivalent.

**HUS 119 Development and Activities
for Young Children (2-0) 2 hours**

Theory of speech and language development in young children. Practical activities, methods of facilitating language development and approaches to dealing with language behavioral problems. Criteria for literature selection included. Course is designed for pre-school majors.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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: Sophomore standing and coordinator's approval 60 days prior to the first day of the semester with a minimum G.P.A. of 2.3

HUS 171 Human Service Practicum II (1-12) 4 hours

A continuation of Practicum I. Total of 180 practicum hours, plus 30 hours of supervision.

Prerequisite: Sophomore standing and coordinator's approval 60 days prior to the first day of the semester with a minimum G.P.A. of 2.5

Human Services Program (HUS and HUX)

HUS 210 Principles of Residential 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 212

HUS 211 Principles of Early Childhood Education (3-0) 3 hours

Overview of historical and contemporary theories of preschool education. Includes program planning and use of materials and equipment.

Prerequisite: PSY 222

HUS 212 Adolescent and Adult Development (3-0) 3 hours

Analysis of social, cultural, emotional, and physical aspects of growth and development from adolescence through adulthood.

Prerequisite: PSY 222

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 rehabilitation of the mentally retarded will be emphasized. Present and future perspectives in the field of mental retardation will be discussed.

Prerequisite: None

HUS 214 Group Care of Infants and Toddlers (3-0) 3 hours

An overview of infant and toddler programs. 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

HUS 216 Creative Activities I (2-2) 3 hours

Overview of techniques of conducting creative activities in development of preschool child, including experience in art, music, language arts, science, math, and social play.

Prerequisite: ENG 105 and ENG 107; or equivalent.

HUS 217 Creative Activities II (2-2) 3 hours

Creative activities used in the development and modification of latency and adolescent age children in residential group care.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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: None

HUS 222 The Exceptional Child (3-0) 3 hours

Study of the developmental needs of exceptional children. Includes assessment, screening, educational needs, family communication, community resources, legal aspects, and learning disabilities.

Prerequisite: PSY 222

HUS 270 Administration of Early Childhood Programs (3-0) 3 hours

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 211

FOR ALL HUX COURSES - SEE ADDITIONAL REQUIREMENTS LISTED WITH HUMAN SERVICES PROGRAM UNDER ASSOCIATE IN APPLIED SCIENCE PROGRAMS OF STUDY

HUX170 Introduction to Substance Abuse (3-0) 3 hours

Provides the student with an 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: ENG 105 and ENG 107; or equivalent.

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 multi-variate diagnosis of alcoholism and/or substance abuse. Assessment procedures will include but not limited to Jellinek's categories of alcoholism; Michigan Alcoholism Screening Test (MAST); Behavioral Assessment of Alcohol Abuse (BAAA) and various types of life style questionnaires. Students will be expected to integrate behavioral, psychological, attitudes, physiological and clinical data to support a differential diagnosis. The differential diagnosis methods will be used to match the client with the appropriate differential treatment plan.

Prerequisite: HUX 170

Human Services Program (HUS and HUX) Industrial Building Construction (ISB)

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 the addictive process of alcohol and drugs.

Prerequisite: HUX 170

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, Regulations, 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 contact with clients. Adequate client record documentation systems will be studied and correlated with the process of keeping client records current.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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 III) and the International Classification of Disease (ICD Codes). Abbreviations, spelling, pronunciation are emphasized. A summary of the neurotransmitter process is also included.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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.

Prerequisite: 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 group work 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.

Prerequisite: HUS 118, HUX 170 and SOC 224

INDUSTRIAL BUILDING CONSTRUCTION (ISB)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

ISB 111 Carpentry I (2-2) 3 hours

The essential details of frame dwelling construction, such as footings, girders, 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: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

ISB 112 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: ISB 111

Course fee

ISB 115 Masonry I (1-2) 2 hours

Comprehensive course dealing with various aspects of the masonry trade including such practices as mixing and stringing mortar, laying brick, and corner and wall construction.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

Industrial Electrician (ISE) Machine Tool Trades (ISM & IST)

ISB 116 Masonry II (1-2) 2 hours
An advanced technical course as applied to the practices and methods in the masonry trade. By analysis, demonstration, and discussion, various phases of work which are part of the trade are studied to understand the entire scope of masonry. Such topics as pre-cast panels, facing tile, flashing, load-bearing masonry, basement construction, cavity walls, reinforced brick masonry, expansion and control joints, glass block, and cleaning and patching are covered.
Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

INDUSTRIAL ELECTRICIAN (ISE)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

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.
Prerequisite: Previous electrical experience or education

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, 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, ELC 114
Course fee

MACHINE TOOL TRADES (ISM) & (IST)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

ISM 110 Machine Trades Blueprint Reading (3-0) 3 hours
A study of 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, section, auxiliary views, symbols, surface finishes and other drafting and design principles.
Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

ISM 111 Machine Shop I (2-3) 3 hours
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.
Prerequisite: ISM 110
Course fee

ISM 112 Machine Shop II (1-4) 3 hours
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, heat treating and materials usage.
Prerequisite: ISM 111
Course fee

ISM 114 Plumbing and Pipefitting I (2-2) 3 hours
Introduces students to the basic principles and practices of plumbing and pipefitting.
Prerequisite: None
Course fee

ISM 115 CNC Programming I (2-2) 3 hours
Provides students with the basic principles and practices of numerical control programming. Manual parts programming will be performed on the latest FANUC controls.
Prerequisite: ISM 111 or ISM 215, and MTH 115
Course fee

Machine Tool Trades (ISM & IST) Japanese (JPN)

ISM 116 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.

Prerequisite: ISM 112

Course fee

ISM 117 Machine Components and Repair (2-2) 3 hours

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: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

ISM 118 CNC Programming II (2-2) 3 hours

A continuation of ISM 115 including advanced part programming dealing with the lathe, mill and drill. Programming of complex parts with the aid of a computer will also be performed.

Prerequisite: ISM 115

Course fee

ISM 119 APT Part Programming (2-2) 3 hours

Programming of NC machine tools using a computer assisted language based on the APT programming language.

Prerequisite: MTH 117 and ISM 118 or Manual Part Programming experience

Course fee

ISM 210 Pump Overhaul and Repair (2-2) 3 hours

Develops the student's ability to diagnose, troubleshoot, repair and maintain common types of centrifugal pumps.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

ISM 211 Moldmaking I (3-0) 3 hours

Basic fundamentals of mold construction and components.

Prerequisite: MTH 114

ISM 212 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.

Prerequisite: ISM 118 or Manual Part Programming Experience, MTH 117

Course fee

ISM 213 CNC Operations I (2-2) 3 hours

Set-up and operation of CNC controlled industrial vertical milling machine and turning center with FANUC controls.

Corequisite: ISM 215, or ISM 111, or approved experience

Course fee

ISM 214 CNC Operations II (1-2) 2 hours

Advanced set-ups, operations, and features of CNC machine tools are covered including the use of a vertical machining

center and turning center with FANUC controls.

Prerequisite: ISM 213

Course fee

ISM 215 Machining Principles (3-0) 3 hours

Theory and practices involved in the operation of modern metal cutting machine tools are covered including carbide insert tooling applications.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

ISP 113 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: ISM 114

IST 110 Basic Die Making (3-0) 3 hours

Presents students with the basic fundamentals of die construction and function.

Prerequisite: ISM 112 equivalent

IST 111 Die Design I (2-2) 3 hours

Fundamentals of die design. Introduces the various mechanisms and components commonly used in die designing.

Prerequisite: IST 110 and DFT 117

Course fee

IST 113 Jig and Fixture Design (2-2) 3 hours

Familiarizes students with the design fundamentals of drill jigs and milling, lathe, assembly, and grinding fixtures.

Prerequisite: DFT 117, ISM 112 or equivalent

Course fee

IST 115 Grinding Technology (2-2) 3 hours

Provides students with an understanding of the purpose and use of grinding and sharpening cutting tools available in industry.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

Course fee

JAPANESE (JPN)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

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.

Prerequisite: None

JPN 122 Beginning Japanese II (4-0) 4 hours

This course continues to develop the basic skills introduced in Japanese 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 or equivalent

JPN 222 Intermediate Japanese II (4-0) 4 hours

As a continuation of Japanese 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 or equivalent

LIBERAL ARTS & SCIENCE (LAS)

Vice President, Educational Affairs, Room C213,
Ext. 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.

Prerequisite: Sophomore standing and permission of instructor

LIBRARY/MEDIA TECHNOLOGY (LMT)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

LMT 114 Supervised Field Practicum I (Variable) 1-2 hours

Supervised observation and directed practice of paraprofessional experience in appropriate academic, special, school, or public library setting. Seminar discussion three hours every three weeks on placement experiences. Students have behavioral and reading assignment, and keep a brief descriptive log. The practicum is arranged in a selected library under the direct supervision of the LMT coordinator and the cooperating library.

Prerequisite: Nine hours of Library/Media Technology coursework and consent of the LMT Coordinator

LMT 115 Supervised Field Practicum II (Variable) 2-4 hours

A continuation of supervised paraprofessional experience in same or alternate setting as in Supervised Field Practicum I. Seminar discussion and assignments continue with some additional objectives and requirements.

Prerequisite: Nine hours of Library/Media Technology coursework, LMT 114 and consent of the LMT coordinator

LMT 121 Introduction to Library Science (3-0) 3 hours

Emphasis on print reference tools such as the card catalog, indexes, and handbooks of information. For all students who want to "cut their research time in half" in the library, this course offers an individualized approach in effective utilization of library materials for reference answers and bibliographic preparation.

Prerequisite: ENG 105, ENG 107 and MTH 102; or equivalent.

LMT 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.

Prerequisite: None

LMT 172 Audio-Visual Production (3-0) 3 hours

Examines the nature of audio-visual materials and explores their various methods of production. Audio-visual materials are developed from conception to preparation through production. Areas of consideration include photography, graphic design, sound recording, overhead transparencies, videotape formats, and developing communication delivery technologies.

Prerequisite: LMT 171

LMT 271 Introduction to Reference (3-0) 3 hours

Indexes, subject specialty reference books, on-line and CD-ROM database searching, telephone and community resources are explored as information tools. The reference interview process and basic access points for information are stressed.

Prerequisite: LMT 121

LMT 272 Cataloging and Classification (3-0) 3 hours

Principles and objectives of the organization of library materials. Emphasis on descriptive cataloging, the Dewey Decimal System, Sears List of Subject Headings, authority files, shelf list and automated cataloging systems. Some exposure to Library of Congress subject headings and classification scheme. Discussion of AACR II cataloging rules.

Prerequisite: LMT 121

LMT 273 Library Materials (3-0) 3 hours

Criteria and sources for selecting, 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: LMT 121

LMT 277 Automation for Libraries (2-2) 3 hours

An introduction to automation in all library departments: circulation, technical services, reference, and administration. Applications of mainframe, mini and microcomputers, turnkey systems, and software are discussed.

Prerequisite: LMT 121

LIBRARY SCIENCE (LSC)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

In addition to LSC 101, see Library/Media
Technology (LMT), formerly Library Science
(LSC).

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: Basic Skills Assessment

MANUFACTURING TECHNOLOGY (MFG)

Engineering, Math & Physical Sciences Division,
Room B162, Ext. 2498

MFG 112 Work Simplifications (3-0) 3 hours

Principles of job analysis and productivity measurement and improvement in techniques used in the work place will be discussed and evaluated. Specific techniques to be studied include motivation and job enrichment, motion and time study, process flow charts and production system evaluation.

Prerequisite: MTH 117 or equivalent

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.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

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 materials handling, cost and value engineering, quality control/assurance, production planning and control, inventory control, methods engineering and time study.

Prerequisite: Final semester standing or division associate dean approval.

MATH COMPUTER SCIENCE (MCS)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

**MCS 124 Programming in BASIC
Language (2-0) 2 hours**

A beginning course in computer programming using the BASIC language. Machine organization, input and output, transfer of control, looping, arrays, character strings and subroutines are the major topics.

Prerequisite: MTH 102 with a grade of "C" or better or 1 year of high school algebra

Course fee

MCS 140 Computer Programming I (3-0) 3 hours

Fulfills 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 ForTran 77. Applications include sorting and searching techniques, root solving procedures, and numerical integration. EXTENSIVE time commitment required in computer lab. Previous programming experience is recommended.

Corequisite: MTH 145 or MTH 224

Course fee

MCS 142 Computer Programming II (3-0) 3 hours

Fulfills the requirements established by the Association for Computing Machinery (ACM) for the CS2 course. Using the "C" computer language this course presents such topics as string processing, internal searching and sorting, recursion, and data structures such as stacks, queues, deques, linked lists, and trees. Extensive time commitment required in computer lab. Spring semester only.

Prerequisite: MCS 140 with a grade of "C" or better, *or* MTH 145 with a grade of "C" or better and proficiency in a programming language

Course fee

Math Computer Science (MCS) Mathematics (MTH)

MCS 240 Introduction to Computer Systems (3-0) 3 hours

Fulfills the requirements established by the Association for Computing Machinery (ACM) for the 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 with a grade of "C" or better
Course fee

MATHEMATICS (MTH)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

MTH 100 Whole Number Arithmetic (1-0) 1 hour*

Intended for students who need help in whole number arithmetic and its application. Note: This course does not apply to any associate degree or career certificate program.

Prerequisite: Basic Skills Assessment

MTH 101 Elementary Concepts of Mathematics (Variable) 1-4 hours*

Basic principles of arithmetic: fractions, decimals, ratios and proportions, percent, very basic algebra, and descriptive graphs. Specific electronic calculator required for this course. Contact EMPS division office for details. *Note: This course does not apply to any associate degree or career certificate program.*

Prerequisite: Basic Skills Assessment

MTH 102 Basic Algebra (Variable) 1-4 hours*

For 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 when appropriate. Note: This course does not apply to any associate degree or career certificate program.

Prerequisite: MTH 101 or equivalent

MTH 104 Geometry (3-0) 3 hours*

Geometry is equivalent to a year-long 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, ration and proportion, area, perimeter, and volume of basic figures. Constructions and the writing of inductive, deductive, and indirect proofs will be included.

Prerequisite: MTH 102 with a grade of "C" or above or 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 cannot meet prerequisite. Includes development of real number system, basic manipulative skills concerning operations with polynomials and solutions of equations, introduction to logarithmic and exponential functions. (Formerly MTH 120.)

Prerequisite: MTH 102 with a grade of "C" or above or Math Placement Test.

* Note: These courses do not apply to an associate degree or career certificate program.

MTH 114 Applied Mathematics I (Variable) 1-3 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.

Specific electronic calculator required for this course. Contact EMPS division office for details.

Prerequisite: None

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.

Specific electronic calculator required for this course. Contact EMPS division office for details.

Prerequisite: MTH 114 with a grade of "C" or above or MTH 102 with a grade of "C" or above or Math Placement Test.

MTH 117 Technical Mathematics I (3-2) 4 hours

College mathematics for students majoring in technology. Includes algebra, electronic calculator, geometry and trigonometry. Specific electronic calculator required for this course. Contact EMPS division office for details.

Prerequisite: MTH 115 with a grade of "C" or above, or MTH 102 with a grade of "C" or above, or Math Placement Test.

* *Note: This course does not apply to any associate degree or career certificate program.*

MTH 118 Technical Mathematics II (3-2) 4 hours

Continuation of MTH 117. Major topics are algebra, geometry, vectors, logarithms, electronic calculator, oblique and analytical trigonometry. Specific electronic calculator required for this course. Contact EMPS division office for details. Spring semester only.

Prerequisite: MTH 117 with a grade of "C" or above

MTH 121 Fundamentals of Mathematics I (3-0) 3 hours

Modern concepts of number theory, logic, sets, Euclidean geometry, probability, statistics and related topics. For elementary education majors; also appropriate for general education. Use of a calculator will be integrated with the concepts of the course.

Prerequisite: One year of high school algebra or MTH 102 or equivalent.

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, logarithms, theory of equations, determinants, binomial theorem, progressions, and mathematical induction.

Specific electronic graphics calculator required for this course. Contact EMPS division office for details.

Prerequisite: MTH 108 with a grade of "C" or above or Math Placement Test

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, and practical applications. Specific electronic graphics calculator required for this course. Contact EMPS division office for details.

Prerequisite: MTH 122 with a grade of "C" or above or Math Placement Test.

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.

Prerequisite: MTH 108 with a grade of "C" or above or Math Placement Test.

MTH 145 Calculus and Analytic Geometry I (5-0) 5 hours

A course in the calculus of algebraic and trigonometric 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. Specific electronic graphics calculator required for this course. Contact EMPS division office for details.

Prerequisite: MTH 123 with a grade of "C" or above or Math Placement Test.

MTH 146 Calculus and Analytic Geometry II (4-0) 4 hours

Continuation of MTH 145 with emphasis on the calculus of transcendental functions. Other topics to include techniques of integration, indeterminate forms, infinite series, and conics. Specific electronic graphics calculator required for this course. Contact EMPS division office for details.

Prerequisite: MTH 145 with a grade of "C" or above

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.

Specific electronic calculator required for this course.

Contact EMPS division office for details. Fall semester only.

Prerequisite: MTH 118 with a grade of "C" or above or Math Placement Test.

MTH 221 Fundamentals of Mathematics II (3-0) 3 hours

Continuation of MTH 121 with emphasis on needs of elementary education major.

Prerequisite: MTH 121 with a grade of "C" or above

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. Specific electronic calculator required for this course. Contact EMPS division office for details.

Prerequisite: MTH 108 with a grade of "C" or above or Math Placement Test.

Course fee

Mathematics (MTH) Mechanical Engineering Technology (MCD)

MTH 224 Introduction to Mathematical Analysis (4-0) 4 hours

Includes such analytical geometry and calculus topics as functions and their graphs, coordinate systems, limits, differentiation and integration of algebraic, logarithmic and exponential functions. Applications are also included. Specific electronic graphics calculator required for this course. Contact EMPS division office for details.

Prerequisite: MTH 122 with a grade of "C" or above or Math Placement Test.

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. Offered only in selected semesters. Offered spring only.

Prerequisite: MTH 146 with a grade of "C" or above.

MTH 227 Ordinary Differential Equations (3-0) 3 hours

Solution of ordinary differential equations of first order and higher order with constant coefficients. Various methods of solving differential equations with variable coefficients. Variation of parameters. Undetermined coefficients. LaPlace Transform method. Selected numerical methods. Infinite series techniques in finding solutions of some equations with variable coefficients. Applications of topics to problems arising in engineering and physical sciences. Offered only in selected semesters. Offered fall and spring only.

Prerequisite: MTH 146 with a grade of "C" or above.

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. Specific electronic graphics calculator required for this course. Contact EMPS division office for details. Offered only in selected semesters.

Prerequisite: MTH 122 with a grade of "C" or above and facility in a high-level programming language

MTH 246 Calculus and Analytic Geometry III (4-0) 4 hours

Continuation of MTH 146. Topics to include 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. Specific electronic graphics calculator required for this course. Contact EMPS division office for details.

Prerequisite: MTH 146 with a grade of "C" or above

MECHANICAL ENGINEERING TECHNOLOGY (MCD)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

MCD 111 Manufacturing Processes (3-0) 3 hours

Various processes, production procedures and materials used in manufacturing studied; casting, machining, forging, rolling, treatment and production of engineering materials.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

MCD 112 Basic Metallurgy I (3-0) 3 hours

Introduction to the theory of metals with emphasis on the study of their physical and mechanical properties relating to application including metal forming, heat treatment and surface treatment of carbon and alloy steels.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

MCD 113 Basic Metallurgy II (3-0) 3 hours

Continuation of MCD 112 with emphasis on cast iron and nonferrous metals and alloys. Foundry, machining, forming, welding, and power metallurgy processes are treated.

Prerequisite: MCD 112

MCD 114 Dimensional Metrology (3-0) 3 hours

Development of techniques of dimensional measurements as applied to work of skilled workers, inspectors, technicians, draftsmen, and engineers.

Prerequisite: ENG 105, ENG 107 and MTH 101; or equivalent.

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. Students must furnish basic required equipment.

Prerequisite: PHY 111 and MTH 117

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.

Prerequisite: MTH 117 or equivalent

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. Student must furnish basic required equipment.

Prerequisite: EGR 121 or DFT 111

Course fee

MCD 215 Machine Design (5-0) 5 hours

Application of empirical formulas used in shaping mechanical components to safely and effectively transmit force and motion. Clutches, brakes, belts, chains, fasteners, gearing springs and cams.

Prerequisite: EGR 215

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.

Prerequisite: MTH 117

MCD 270 Introduction to Thermodynamics (3-0) 3 hours

An introduction to engineering thermodynamics including the first and second laws of thermodynamics, work, and heat. Also included is the study of gases, vapors, internal combustion, and refrigeration cycles.

Prerequisite: MTH 118 and PHY 111

MEDICAL IMAGING (MIM)

Biological & Health Sciences Division, Room C140, Ext. 2445

MIM 110 Introduction to Medical Imaging (3-0) 3 hours

This course will provide the student with 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 and methods of transporting and assisting patients, and gain an understanding of aseptic technique and infection control.

Prerequisite: None

MIM 111 Radiographic Anatomy & Positioning I (4-2) 5 hours

This course will include 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: None

MIM 112 Principles of Radiographic Exposure (2-2) 3 hours

This course will provide the student with an understanding of the factors that control the production of a radiographic image and a basic understanding of radiation protection.

Prerequisite: Admission to the Medical Imaging Program

Corequisite: MIM 110, MIM 111

MIM 113 Radiographic Anatomy & Positioning II (4-2) 5 hours

This course will include 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

MIM 114 Clinical Practice I (0-16) 3 hours

Supervised competency based clinical practice. Emphasis on routine examination of the chest and abdomen including examinations of the digestive system, urinary tract, and biliary collecting system, and appendicular skeleton.

Prerequisite: MIM 112

Corequisite: MIM 113

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

MIM 116 Advanced Radiographic Procedures (1-0) 1 hour

A study of the special radiographic procedures routine performed in the majority of radiology departments. This study shall identify the contrast agents, anatomical structures investigated, and examination procedures.

Prerequisite: MIM 114

Corequisite: MIM 115

MIM 210 Technical Aspects of Patient Care (2-0) 2 hours

A brief survey of patient communication, acute situations, trauma radiography, contrast media and pharmacology are emphasized.

Prerequisite: MIM 115, MIM 116, BIO 124

MIM 211 Imaging Equipment (5-2) 6 hours

Mechanical and electrical physics applied to x-ray equipment. Factors affecting x-ray emission. Survey of digital vascular radiography, interventional procedures and basic principles of ultrasound. Laboratories and discussions in principles of radiographic exposure and image evaluation.

Prerequisite: MIM 115, MIM 116, BIO 124

MIM 212 Clinical Practice III (0-18) 3 hours

Supervised clinical practice. Emphasis on routine special procedures, mammography, surgical, trauma, and mobile radiography. Observations and practice in vascular and interventional procedures.

Prerequisite: MIM 115, MIM 116, BIO 124

Medical Imaging (MIM) Medical Lab Technology (MLT)

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 or permission of the coordinator

MIM 214 Advanced Topics in Radiography (5-2) 6 hours
Radiation biology, radiation regulations, and radiation measurements. Pediatric and geriatric radiography. Sensitometry and quality control. Survey of radiation therapy and nuclear medicine. Laboratories and lecture in principles of radiographic exposure and quality control. Film critique.
Prerequisite: MIM 211, MIM 212, MIM 213

MIM 215 Clinical Practice IV (0-18) 3 hours
Supervised competency based clinical practice. Emphasis continued on routine and vascular special procedures, mammography, surgical, trauma and mobile radiography. Includes orientation rotations to computed tomography and ultrasound and completion of course and terminal program competencies.
Prerequisite: MIM 211, MIM 212, MIM 213

MIM 216 Computed Imaging (2-0) 2 hours
Computer anatomy and functions related to computed tomography and magnetic resonance imaging. Physics and basic imaging parameters of these modalities. Presentation of case studies.
Prerequisite: MIM 211, MIM 212, MIM 213 or permission of the coordinator

MIM 217 Applied Radiation Biology (1-0) 1 hour
A survey of the somatic and genetic effects of ionizing radiation.
Prerequisite: None

MIM 218 Survey of Radiology Administration (1-0) 1 hour
A survey of the structure and function of the radiology department and its relation to the hospital and the health care consumer.
Prerequisite: RAD 116 or permission of the coordinator

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, MIM 212, or Registry eligible

MEDICAL LABORATORY TECHNOLOGY (MLT)

Biological & Health Sciences Division,
Room C140, Ext. 2445

MLT 110 Introduction to Medical Lab Technology (2-2) 3 hours

An introduction to the profession of Medical Laboratory Technology and will be concerned with medical ethics, legal implications of laboratory testing, certification of laboratory personnel, types of health care laboratories, and theory and practice of test procedures performed in a clinical urinalysis laboratory.

Prerequisite: ENG 105, ENG 107, and MTH 102; or equivalent.

Course fee

MLT 111 Immunology and Immunochemistry (3-6) 6 hours

Theory and practical experiences in laboratory immunology and immunochemistry. The course stresses laboratory safety, explains the functioning of a normal and abnormal immune system, problem solving of various antigen-antibody reactions related to blood transfusions diagnosis of diseases utilizing antigen-antibody testing, and checking various courses of therapy.

Prerequisite: Admission to MLT program

Corequisite: MLT 110 and CHM 121

Course fee

MLT 112 Hematology and Coagulation (3-6) 6 hours

Prepares medical laboratory technology students to perform required tests in the areas of hematology and coagulation. Theoretical knowledge of the hematopoietic system and procedures for the purpose of identifying and quantifying different cell types, cell structure, chemical content, and functional activity are stressed. Coagulation theories and factor identification in specific bleeding disorders are presented.

Corequisite: MLT 111

Course fee

MLT 115 Phlebotomy Techniques (1-6) 3 hours

This course is a study of current phlebotomy techniques. Students will develop skill in performing phlebotomy procedures in various health care settings. It includes proper use of equipment, current safety standards, medical and legal policies and regulations, interpersonal skills, and correct transport and specimen preparation for laboratory testing.

Prerequisite: High school graduate and MLT 110

MLT 210 Clinical Chemistry (2-6) 4 hours

Prepares the MLT student to perform and interpret chemical test results on body fluids for the purposes of aiding in diagnosis and monitoring treatment regimes of various disease entities. Manual, semi-automated, and automated methodologies are presented. Laboratory safety and quality control procedures are stressed.

Prerequisite: MLT 112 and CHM 123

Course fee

MLT 212 Advanced Medical Lab Technology (3-25) 8 hours

Presents advanced development of proficiencies in laboratory medicine by offering supervised practical experience in a clinical laboratory setting. Automation is stressed along with computer usage. Advanced theory in parasitology, mycology, and chemical analyses are studied.

Prerequisite: MLT 213

Course fee

MLT 213 Clinical Microbiology (2-6) 4 hours

Prepares the MLT student to perform microbiological procedures on body secretions for the purposes of identification of clinically relevant microorganisms using cultural, morphological and chemical means. Quality control and laboratory safety are stressed.

Prerequisite: MLT 210 and BIO 125

Course fee

MUSIC (MUS)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

MUS 120 Vocal Ensembles (0-2) 1 hour

Understanding and enjoyment of choral music. Student may choose Gospel Choir, CLC Singers, or Choir of Lake County (up to 4 hours may apply toward a degree).

Prerequisite: None

Course fee

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. No vocal background is needed. Intended for non-music majors.

Prerequisite: None

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: None

Course fee



Music (MUS)

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. This course may be taken up to four (4) times.

Prerequisite: Audition or consent of the instructor

Course fee

MUS 124 Introduction to Music (3-0) 3 hours

A non-technical listening course emphasizing recognition and understanding of various styles of music, past and present.

Prerequisite: None

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.

Prerequisite: None

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. Students should combine this course with Piano Class I (MUS 145, 1 credit hour).

Prerequisite: None

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. Students without keyboard background should combine this course with Piano Class I (MUS 145, 1 credit hour). Students without theory preparation may take Fundamentals of Music (MUS 127) concurrently.

Prerequisite: None

MUS 129 Theory of Music II (4-0) 4 hours

Written four-part harmony, analysis of form and harmony, 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.

Prerequisite: None

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 and may be taken four (4) times.

Prerequisite: None

Lab Fee

MUS 143-144 Applied Music-Instrumental (Variable) 1-2 hours

These courses are 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 and may be taken four (4) times.

Prerequisite: None

Course fee

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. Students should combine this course with Fundamentals of Music (MUS 127, 2 credit hours).

Prerequisite: None

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 or equivalent

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. MUS 127 Fundamentals of Music is strongly recommended as a companion course for students who need work in reading pitches and rhythms.

Prerequisite: None

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 160-169 Applied Music-Instrumental (Variable) 1-2 hours

These courses are 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 and may be taken four (4) times.

Prerequisite: None

Course fee

MUS 180-188 Applied Music-Instrumental (Variable) 1-2 hours

These courses are 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 and may be taken four (4) times.

Prerequisite: None

Course fee

MUS 223 Jazz Ensemble (0-2) Variable
 Understanding and enjoyment of instrumental music through selected examples of standard instrumental ensemble literature of all periods. This course may be taken four (4) times.

Prerequisite: Audition

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. 20th Century musical techniques are considered.

Prerequisite: MUS 228

MUS 241 Applied Music-Voice II (Variable) 1-2 hours
 This course is designed for the vocalist who is well advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis and may be taken four (4) times.

Prerequisite: None

Course fee

MUS 243-244 Applied Music-Instrumental (Variable) 1-2 hours

These courses are designed for the instrumentalist who is well advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis and may be taken four (4) times.

Prerequisite: None

Course fee

MUS 245 Piano Class III (1-1) 1 hour

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 (Variable) 1-2 hours

These courses are designed for the instrumentalist who is well advanced and intends to become seriously involved with music. This is a course of independent study on a private lesson basis and may be taken four (4) times.

Prerequisite: None

Course fee

NURSING (NUR)

Biological & Health Sciences Division, Room C140, Ext. 2445

NUR 171 Nursing: Universal Self-Care (3-12) 7 hours

Focuses on universal self-care requirements and behaviors, and introduces 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 with few self-care agency limitations. Introduces the student to the health care system and the role of the nurse. Peer learning groups and mastery testing 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 family and the health care system focused at developmental self-care. In both simulated and clinical laboratory settings, the student applies the nursing process in using the helping methods for clients with few to moderate self-care agency limitations. Peer learning groups and mastery testing are used; proficiency examinations are available.

Prerequisite: A grade of "C" or better in NUR 171 and BIO 124

Course fee

NUR 271 Nursing: Health-Deviation Self-Care I (3-18) 9 hours

Building upon NUR 172, this course focuses on the human being's health-deviation self-care demands and responses to selected 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 in using the helping methods for clients with moderate to severe self-care agency limitations. Opportunity to plan client care with nursing team members is provided. Peer learning groups and mastery testing are used; proficiency examinations are available.

Prerequisite: PSY 222 and a grade of "C" or better in NUR 172 and BIO 125

Course fee

**NUR 272 Nursing: Health-Deviation
Self-Care II (3-18) 9 hours**

Builds on NUR 271 and focuses on the human being's health deviation self-care demands and responses to multiple and complex health problems. Includes emphasis on health deviation requiring long term institutionalization. In both simulated and clinical laboratory settings, the student applies the nursing process in using the helping methods for clients with more severe self-care agency limitations. Provides an introduction to the role of the nurse as a manager and issues faced in transition to practice as a registered nurse. Opportunity provided to participate in client centered conferences. Peer learning groups and mastery testing are used.

Prerequisite: Grade of "C" or better in NUR 271

Course fee

**PERSONAL DEVELOPMENT
(PDS)**

Counseling Center, Room C110, Ext. 2572

PDS 120 Becoming a Successful Student (2-0) 2 hours

Designed to train students in attitudes and skills valuable for school success; such as 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. This course may not be audited.
Corequisite: ENG 107 or equivalent.

PDS 121 Human Potential (1-0) 1 hour

For students to become aware of their personal strengths and values in order to resolve personal conflicts and set goals. Groups of 8 to 12 students will work in a structured pattern to reinforce positive attributes of group members. With new personal understanding, students will be ready to achieve appropriate goals. Seminar especially valuable for students who wish to gain more self-confidence, motivation, and direction. This course may not be audited.

Prerequisite: None

PDS 122 Career Exploration (1-0) 1 hour

This seminar, led by a counselor, helps students examine their interests, personality styles, values, abilities and experiences to better explore satisfying career areas. Students are guided to research possible careers in order to identify each career's description and opportunities, and then to realistically compare how each career satisfies the student's self-assessment and personal goals. Throughout this process, pre-employment skills that include placement resources, resume writing and interviewing guidelines are discussed. This course may not be audited.

Prerequisite: None

PHILOSOPHY (PHI)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

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 made to get students to think out their own answers to these questions.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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: ENG 105, ENG 107 and MTH 102; or equivalent.

PHI 123 Philosophy of Religion (3-0) 3 hours

Discusses the beliefs within Hinduism, Judaism, Buddhism, Christianity, Islam, and Atheistic Humanism concerning the existence of God, the nature of self, life's purpose, evil, prayer, ethics and afterlife. Attention given to cultural influences, similarities and differences and the relationship of faith and reason.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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 to find solutions to these problems in terms of ethical theory.

Prerequisite: ENG 105 and ENG 107; or equivalent.

**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: ENG 105 and ENG 107; or equivalent.

PHYSICAL EDUCATION (PED)

Physical Education Division, Room PEC-201,
Ext. 2475

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. Students should consult a recent class schedule for sports offered during a particular semester. This course may be repeated and credit earned may be used to meet elective requirements for the A.A. and A.S. degrees. Credit is earned at the rate of 0.5 credit hours for each 16 hours of instruction. A maximum of 4 credit hours may be earned for PED 121.

Prerequisite: None

Course fee

PED 122 Individual Sports II (Variable) 0.5-1 hour

Instruction of skills and techniques in individual sports. Participation in these sports and instruction in the rules and strategies involved. In some instances, fees are charged. These courses may be repeated and credit used to meet elective requirements for the A.A. and A.S. degrees. A maximum of 4 credit hours may be earned for PED 122.

Prerequisite: None

Course fee

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. Courses may be repeated and credit applied to A.A. or A.S. degrees. Credit is earned at the rate of 0.5 credit hours for each 16 hours of instruction. A maximum of 4 credit hours may be earned for PED 123.

Prerequisite: None

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.

Prerequisite: Written report of a physician. (May be repeated for additional 1 credit)

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.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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. Expenses for group projects (\$35-\$50) assumed by the students. Outdoor and indoor events are required. Class projects will be graded according to the requirements of the project. Equipment will be provided for each event. For students going into a career in physical education, recreation, pre-school teaching, elementary education, social work or voluntary agencies.

Prerequisite: ENG 105 and ENG 107; or equivalent.

PED 140 Contemporary Health Issues (2-0) 2 hours

Basic human physiology, nature of disease, and principles and problems of personal health.

Prerequisite: Student must have a current CPR card or acquire one to complete this course; ENG 105 and ENG 107; or equivalent.

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.

Prerequisite: None

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: ENG 105 and ENG 107; or equivalent.

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: ENG 105, ENG 107, and MTH 101; or equivalent.

PED 220 Physical Education in the Elementary School (2-2) 3 hours

Designed specifically for classroom teachers, teacher aide, and elementary physical education major. Curriculum, materials, and progression of activities in elementary school physical education discussed, demonstrated and practiced.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

Physical Education (PED)

PED 222 Coaching Strategies in Basketball (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 session, and an understanding of offensive and defensive team strategies will be covered.

Prerequisite: ENG 105 and ENG 107; or equivalent.

PED 223 Coaching Strategies in Football (2-0) 2 Hours

The course is designed to instruct students in the basic offensive and defensive schemes, terminologies, scouting "break-down" and analyses, special teams, offensive and defensive philosophies, and staff hiring practices.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

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. May be repeated a maximum of 4 times. No more than one hour may be taken in each sport area.

Prerequisite: ENG 105, ENG 107, and MTH 101; or equivalent.

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. A maximum of 2 credit hours can be earned for PED 228.

Prerequisite: Student must have a current CPR card or acquire one to complete this course; ENG 105 and ENG 107; or equivalent.

PED 229 Experience in the Out-Of-Doors (Variable) 2-3 hours

Extends the classroom into 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.

Prerequisite: ENG 105 and ENG 107; or equivalent.

Course fee



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: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

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 objective, 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. A maximum of 3 credit hours can be earned for PED 242.

Prerequisite: ENG 105 and ENG 107; or equivalent.

Course fee

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: PED 128 and PED 129 or equivalent.

PHYSICS (PHY)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

PHY 111 Technical Physics I (3-2) 4 hours

Study of mechanics, basic properties of matter, and heat. Topics covered include forces, motion, work, energy, harmonic motion, elasticity, waves and sound.

Prerequisite: One year of high school algebra, MTH 102, or MTH 115

Course fee

PHY 112 Technical Physics II (3-2) 4 hours

Study of temperature, heat and 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 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: ENG 105, ENG 107, and MTH 101; or equivalent.

Course fee

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.

Prerequisite: 2 years of high school algebra or MTH 108.

Course fee

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. Offered fall and spring only.

Prerequisite: MTH 145 and concurrent enrollment in MTH 146

Course fee

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. Offered fall and spring only.

Prerequisite: PHY 123

Course fee

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. Offered summer only.

Prerequisite: PHY 124

Course fee

POLITICAL SCIENCE (PSC)

Social Science Division, Room A243, Ext. 2532

PSC 121 American National Politics (3-0) 3 hours

Presents the arguments of today's United States with some emphasis on the ideas of the legislative, executive and judicial leaders of our nation. This course substitutes for required tests on the Constitution.

Prerequisite: ENG 105 and ENG 107; or equivalent.

PSC 122 State and Local Politics (3-0) 3 hours

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: ENG 105 and ENG 107; or equivalent.

PSC 221 Comparative Political Systems (3-0) 3 hours

Study of various governmental systems: democracy, socialism, communism, theocracy, and fascism. Selected countries will be analyzed to acquaint students with the theories and types of these governmental units.

Prerequisite: ENG 105 and ENG 107; or equivalent.

PSC 222 United States Foreign Policy (3-0) 3 hours

Critical analysis of contemporary international problems with an emphasis on theory, decision-making, past and present global crisis, American foreign policy and the nuclear arms race. Emphasis is on the principles underlying international relations and on locating reliable sources for making informed opinions in foreign policy.

Prerequisite: ENG 105 and ENG 107; or equivalent.

PSC 223 Political Campaigns and Elections (3-0) 3 hours

Historical development and modern strategies of political parties and interest groups in campaigns and elections. Attention given to an analysis of current elections at the national, state, and local levels.

Prerequisite: ENG 105 and ENG 107; or equivalent.

PSYCHOLOGY (PSY)

Social Science Division, Room A243, Ext. 2532

PSY 121 Introduction to Psychology (3-0) 3 hours

Human behavior with reference to perception, learning individual differences, intelligence, and personality. Developmental method stressed rather than experimental. *Prerequisite:* ENG 105, ENG 107, and MTH 102; or equivalent.

PSY 122 Psychology in Business and Industry (3-0) 3 hours

Human behavior and its practical applications in business. Psychological applications in personnel and marketing problems, employee selection, morale and supervisory practices. *Prerequisite:* ENG 105 and ENG 107; or equivalent.

PSY 129 Psychology of Women (3-0) 3 hours

Provides an opportunity to examine critically many of the current views on femininity and masculinity and a more comprehensive understanding of the nature and potential of women. Includes the following topics: biological determinants, development of sex differences from the acquisition of sex role identity in childhood through sex differences in adult personality, cognition and role behavior. *Prerequisite:* PSY 121

PSY 221 Educational Psychology (3-0) 3 hours

Human behavior and conditions, both physical and social, by which it is modified. Special attention to formal education situations and problems. Laboratory experience includes observation in local public schools. *Prerequisite:* PSY 121

PSY 222 Child Growth and Development (3-0) 3 hours

Physical, social, emotional and mental development of child from conception through adolescence. Methods of studying children individually and collectively discussed. *Prerequisite:* PSY 121

PSY 223 Abnormal Psychology (3-0) 3 hours

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

PSY 224 Theories of Personality (3-0) 3 hours

Survey of the major theories of personality. Theorists will be studied according to the following categories; psychoanalytic; social-biological; psycho-statistical; stimulus-response; and existential. Several case studies will be presented for analysis. *Prerequisite:* PSY 121

PSY 225 Social Psychology (3-0) 3 hours

Introduction to the study of the individual's interaction with his social environment. Consider problems of social learning, attitude formation, persuasion, conformity, communication, social influence processes and group behavior. *Prerequisite:* PSY 121

RADIOGRAPHY (RAD)

See Medical Imaging Page 149.

REAL ESTATE (RLE)

Business Division, Room A143, Ext. 2515

RLE 110 Real Estate Transactions and Mathematics (3-0) 3 hours

This course fulfills the pre-exam requirements for a salesperson's license, but will also serve the avocational needs of first-time buyers or investors. Topics include, but are not limited to, real property and laws relating to ownership; valuation of real property; federal income tax laws affecting real estate; financing of real estate; settlement; real estate practice; and pertinent state laws and topics. Basic mathematics applied to situations involving real estate related situations will be presented. *Prerequisite:* CSS 103 and MTH 102; or equivalent.

RLE 111 Real Estate Transactions (2-0) 2 hours

This course is mandatory to file for Illinois Real Estate Salespersons Examination. Course is mandatory before filing for examination. It may be substituted for the refresher course for license reinstatement if taken within one year of reinstatement application. The course includes instruction in real estate law, types of interest and ownership in real estate, home ownership, legal descriptions, titles, liens, taxes, encumbrances, listing, advertising, appraisal, finance, closings, professional code of ethics. *Prerequisite:* None

RLE 112 Contracts and Conveyances (2-0) 2 hours

This course is mandatory for the State of Illinois broker applicant. The course includes instruction in deeds, fixtures, contracts, real estate closings, foreclosure and redemption, land use controls, landlord/tenant, cooperatives and condominiums. *Prerequisite:* RLE 111 or RLE 110 or licensed real estate salesperson

Real Estate (RLE) Refrigeration and Air Conditioning (RAC)

RLE 210 Real Estate Investing (2-0) 2 hours

This course is acceptable for fifteen hours of credit toward meeting the State of Illinois's broker education requirements for real estate licensure. The course provides the principles and practices of real estate investment including investment evaluation techniques for a variety of real properties, managing costs, legal requirements, financing, and income tax considerations. It is intended for owners of real estate as an investment and real estate practitioners providing advice to potential investors.

Prerequisite: RLE 111 or RLE 110 or licensed real estate salespersons or brokers

RLE 211 Real Estate Finance (2-0) 2 hours

Includes instruction in types of financing, sources of financing, mortgages, mortgage documents, closing a mortgage, interest, liens, foreclosures, insurance, mortgage risk, principles of property value for mortgage credit, mortgage analysis, construction loans.

Prerequisite: RLE 110 or RLE 111 or licensed real estate salesperson

RLE 212 Real Property Management (2-0) 2 hours

Includes instruction in fundamentals of tenant-management relationship, property modernization, property maintenance, leases, insurance, commercial property, industrial property, advertising.

Prerequisite: RLE 110 or RLE 111 or licensed real estate salesperson

RLE 213 Brokerage and Sales (2-0) 2 hours

Includes instruction in qualifications and functions of a real estate broker; land utilization, appraisal methods and principles, office organization, selection, training and supervision of salespersons and office personnel; compensation of salesperson listings; prospects; real estate markets; financial control; and government regulations.

Prerequisite: RLE 110 or RLE 111 or licensed real estate salesperson

RLE 214 Real Estate Appraisals (2-0) 2 hours

For salespersons or brokers. This course includes instruction in the appraisal process, real property value, economic trends, depreciation, and land value. The class shall complete a sample appraisal report project using the three basic approaches to value.

Prerequisite: RLE 110 or RLE 111 or licensed real estate salesperson

RLE 215 Advanced Real Estate Principles and Review (1-0) 1 Hour

This course serves as a pre-licensing review to update those about to take the licensing exam (course can be repeated).

This course is mandatory for the State of Illinois broker applicant. It includes instruction in Illinois real estate law and the broker-salesperson relationship. This course also qualifies for the 15 hour refresher course for reinstatement of license.

Prerequisite: RLE 110 or RLE 111

RLE 299 Current Topics in Real Estate (1-0) 1 hour

This course is designed to meet the continuing education requirements for real estate licenses at both the salespersons and broker levels. The course is repeatable. Topics included in this course are: license law and escrow, anti-trust, fair housing, agency, appraisal, property management, rights and duties of parties to the real estate transaction, and financing.

Prerequisite: Real Estate salesperson or broker level of licensure.

REFRIGERATION AND AIR CONDITIONING (RAC)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

RAC 110 Theory of Refrigeration (4-3) 5 hours

Lectures, demonstrations and lab assignments 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. The student will be required to provide basic hand tools that will be used in this and other refrigeration and air conditioning courses.

Prerequisite: None

Course fee

RAC 111 Domestic Refrigeration Systems (3-3) 4 hours

Service needs of the domestic refrigeration industry including servicing of domestic refrigerators, freezers, ice makers, 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 practiced. The student will be required to provide their own basic tools.

Prerequisite: RAC 110, RAC 174

Course fee

Refrigeration and Air Conditioning (RAC)

RAC 112 Residential Air Conditioning Systems (3-3)

4 hours

A study of the basic principles, practices and operations of air conditioning equipment used for residential cooling. Laboratory work includes the installation, operating, testing and troubleshooting of various types of air conditioning equipment. The student will be required to provide their own basic tools.

Prerequisite: RAC 110, RAC 174

Course fee

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 load charts are presented. The student will be required to provide their own basic tools.

Prerequisite: RAC 110, 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 dehumidification are included. The student will be required to provide their own basic tools.

Prerequisite: RAC 110, 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. The student will be required to provide their own basic tools.

Prerequisite: RAC 112, RAC 118, 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. The student will be required to provide their own basic tools.

Prerequisite: RAC 110, RAC 113, 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. The student will be required to provide their own basic tools.

Prerequisite: RAC 110, RAC 174

Course fee

RAC 119 Electric Motors and Controls (4-3)

5 hours

Provides a background in the theory of operations application and installation 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. The student will be required to provide their own basic tools.

Prerequisite: RAC 110, RAC 174

Course fee

RAC 171 Refrigeration and Air Conditioning Code (3-0)

3 hours

Offers students an opportunity to learn the requirements placed on contractors and installation personnel involved in the 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. Hours or credit would be arranged with instructor. The student will be required to provide their own basic tools.

Prerequisite: RAC 110, 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. The student will be required to provide their own basic tools.

Prerequisite: RAC 110, RAC 112

Course fee

RAC 174 Applied Electricity (3-2)

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. The student will be required to provide their own basic tools.

Prerequisite: None

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 electrical devices used in conjunction with pneumatic controls. The student will be required to provide their own basic tools.

Prerequisite: RAC 119, RAC 114

Course fee

ROBOTICS (ROB)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

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: None

Course fee

ROB 112 Automated Systems Controls (2-2) 3 hours

Provides 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 components is the major topic of the second half of the course.

Prerequisite: ROB 111, ELC 111, MTH 117 and PHY 111

Course fee

The robotics field is very broadly defined. Students desiring further study should consider the following:

- ELC 114 Motor and Machine Controls
- ELC 211 Electrical Machinery
- ELT 171 Industrial Control Systems
- ELT 213 Introduction to Digital Electronics
- ELT 216 Microprocessors I
- FLU 110 Pneumatic Power Systems
- FLU 111 Hydraulic Power Systems
- MCD 212 Mechanisms
- MCD 215 Machine Design

SOCIAL SCIENCE (SSC)

Social Science Division, A243, Ext. 2532

SSC 111 Contemporary American Problems I (3-0) 3 hours

Interdisciplinary course stressing interrelationship of social sciences. Materials developed through survey of political facts and concepts of sociology, economics, and political science and their relationship to historical development of United States. Major emphasis deals with historical and contemporary problems facing society.

Prerequisite: None

SSC 112 Contemporary American Problems II (3-0) 3 hours

Contemporary American Problems is presently utilized as an independent study course for students who need this course to complete career program requirements. Enrollment must be approved by division chairperson.

Prerequisite: None

SOCIOLOGY (SOC)

Social Science Division, Room A244, Ext. 2532

SOC 121 Introduction to Sociology (3-0) 3 hours

Introductory analysis and description of structure and dynamics of human behavior in our society. Application of scientific methods of 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 considered.

Prerequisite: ENG 105 and ENG 107; or equivalent.

SOC 222 Social Problems (3-0) 3 hours

Analysis of contemporary social problems and investigation of theories dealing with 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, and militarization. SOC 121 is recommended but not required to enroll in this course.

Prerequisite: ENG 105 and ENG 107; or equivalent.

Category I course

Sociology (SOC) Spanish (SPA) Speech (SPE)

SOC 223 Deviance (3-0) 3 hours

The sociological study of the origins, causes, and control of deviance and deviant behavior; deviance as a labelling process; course emphasis placed on individual and group deviance, resulting from societal norms and values. Some areas to be covered: drug use, sexual deviance, criminal behavior, marginal deviance, career deviance. SOC 121 is recommended but not required to enroll in this course.

Prerequisite: ENG 105 and ENG 107; or equivalent.

SOC 224 Sociology of the Family (3-0) 3 hours

A study of the interaction between social systems and the family as a system. Includes an analysis of the dynamics of the individual nuclear family with implications for husband/wife parenting roles.

Prerequisite: ENG 105 and ENG 107; or equivalent.

SOC 225 Social Stratification (3-0) 3 hours

An examination of the causes and consequences of social inequality, particularly those involving the distribution of wealth, power, and prestige. A study of the relationship between social class and group interests, ideologies, and conflict. SOC 121 is recommended but not required to enroll in this course.

Prerequisite: ENG 105 and ENG 107; or equivalent.

SPANISH (SPA)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

SPA 121 Beginning Conversational Spanish I (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: ENG 105 and ENG 107; or equivalent.

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 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 or three years of high school Spanish

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 or three years of high school Spanish

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

SPEECH (SPE)

Communication Arts, Humanities & Fine Arts
Division, Room B237, Ext. 2550

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 program.

Prerequisite: None

SPE 102 English Pronunciation: Consonants (3-0) 3 hours

For students wishing to work intensively on learning to pronounce the consonant sound 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 program.

Prerequisite: None

SPE 111 Communications II (3-0) 3 hours

For students in career programs or individuals interested in improving communication skills. Designed to encourage understanding and application of basic communication principles. Includes the study of the communication process, awareness of self in this process, interaction in interpersonal situations, and role playing in interviews.

Prerequisite: None

SPE 121 Fundamentals of Speech (3-0) 3 hours

Fundamentals of communication principles, understanding your role in the communication process, and speech presentation in audience situations. Includes small group experiences and public speaking.

Prerequisite: ENG 105 and ENG 107; or equivalent.

SPE 122 Business and Professional Speaking (3-0) 3 hours

For students desiring 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 before an audience comfortably and effectively.

Prerequisite: ENG 105 and ENG 107; or equivalent.

SPE 123 Group Discussion (3-0) 3 hours

The study of the small group with an emphasis on decision making and problem solving. A behavioral approach to group communication that includes leadership, interpersonal relationships, communications barriers, conflict resolution, etc. Although of general interest, course should be of special interest to students in business, teaching or psychology programs.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

SPE 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: ENG 105 and ENG 107; or equivalent.

SPE 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. Work on college productions required.

Prerequisite: ENG 105 and ENG 107; or equivalent.

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: ENG 105 and ENG 107; or equivalent.

SPE 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. This course may be taken three (3) times.

Prerequisite: SPE 125 or SPE 126

SPE 220 Creative Dramatics for Classroom Teacher (3-0) 3 hours

A course in the theory and practice of creative dramatics, story telling and puppetry. Some introductory material regarding theatre with children and performance programming in the church, school and community.

Prerequisite: SPE 121

Recommended: EDU 221

SPE 222 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: ENG 105 and ENG 107; or equivalent.

SPE 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: SPE 125

SPE 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: SPE 125

Course fee

SPE 229 Stage Makeup (3-0) 3 hours

An investigation of the principles, techniques and materials of stage makeup and practical experience in their application.

Prerequisite: None

Course fee

VOCATIONAL SKILLS TRAINING (VST)

Adult Continuing Education and Extension Services Division, Building 4, Ext. 3635

Note: The following VST courses do not apply to any associate degree or career certificate program.

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.

Prerequisite: None

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.

Prerequisite: None

VST 721 Computer Typing I (1-2) 2 hours

Students will enhance their typing skills by learning how to type on a computer with speed and accuracy.

Prerequisite: None

VST 722 Word Processing (1-2) 2 hours

Students will learn basic word processing skills.

Prerequisite: None

VST 723 Data Base (2-2) 3 hours

Students will learn the basics of simple electronic filing on an IBM computer.

Prerequisite: None

WATER-WASTEWATER (WWW)

Engineering, Math, Physical Sciences Division, Room B162, Ext. 2498

WWW 111 Maintenance of Mechanical and Electric 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.

Prerequisite: ENG 105, ENG 107, and MTH 101; or equivalent.

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.

Prerequisite: ENG 105, ENG 107, and MTH 101; or equivalent.

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.

Prerequisite: ENG 105, ENG 107, and MTH 101; or equivalent.

WWW 114 Introduction to Water and Wastewater Analysis (2-3) 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 placed on the use of standard methods of analysis for compliance monitoring requirements.

Prerequisite: ENG 105, ENG 107, and MTH 101; or equivalent.

Course fee

WWW 115 Intermediate Waterworks Operations (3-0) 3 hours

Potable Water—Aids the student in preparing for a class "B" state certification examination. Class "B" waterworks facilities include treatment ground water using filtration, aeration, and/or ion exchange as the primary treatment methods. Includes stability control, fluoridation, disinfection, water quality, and laboratory procedures.

Prerequisite: WWW 113 or class "C" license

**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.

Prerequisite: WWW 112

**WWW 117 Intermediate Water and Wastewater
Analysis (2-3) 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.

Prerequisite: WWW 114 or CHM 120

Course fee

**WWW 118 Advanced Waterworks
Operations (3-0) 3 hours**

Potable Water—Aids the student in preparing for a class "A" state certification examination. Includes surface water resource management, coagulation and sedimentation, taste and odor control, water softening by chemical precipitation, and emergency operations.

Prerequisite: WWW 115 or class "B" license

WELDING (WLD)

Engineering, Math, Physical Sciences Division,
Room B162, Ext. 2498

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. Student must furnish basic required equipment.

Prerequisite: None

**WLD 117 Applied Fabricating and
Processing (2-2) 3 hours**

Allows students 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, WLD 113, and either WLD 172, 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 applications, set up, tools, safety, shop procedures, and selection and identification of materials will be covered. Development of welding skills are secondary to the primary understanding of safety, knowledge of welding processes, application and associated equipment.

Prerequisite: None

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/Corequisite: 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 is emphasized. Includes the opportunity to work with a variety of material thicknesses, joint designs and preparations, 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

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-fed" 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

Coourse fee

Welding (WLD) Continuing Education

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. Student shall be responsible for the costs of any testing or lab reports performed by outside agents. *Prerequisite:* WLD 170 and WLD 171 and either WLD 174, WLD 175, or WLD 178. Individuals or groups with special needs or requirements may enroll with the consent of the program coordinator.

Course fee

WLD 178 Gas Tungsten Arc Welding (2-2) 3 hours

Theory and skill development of GTAW (Tig or "Heliarc" process) arc 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, operation, troubleshooting, maintenance and repair are incorporated throughout the course.

Prerequisite: WLD 170 or consent of instructor

Course fee

Continuing Education Courses

Below is a current list of Continuing Education courses offered by the College of Lake County. All of the courses listed below are admission category III courses. This list will change each semester as courses are added and deleted based upon needs assessment. Complete descriptions and other information regarding these courses may be found in the class schedule or obtained from the Division of Adult and Continuing Education and Extension Services (708) 223-3616.

GSA 100	Visual Thinking	1 credit	GSF 025	Adult Physical Assessment	3 credits
GSA 101	Effective Audio-Visual Thinking	1 credit	GSF 026	Pharmacology for Allied Health	1 credit
GSA 102	Problem Solving Techniques	1 credit	GSF 029	Radiographic Pathology	2 credits
GSB 752	Introduction or Microcomputers/ Appleworks	2 credits	GSF 030	Radiography Seminar	2 credits
GSB 782	Introduction to Macintosh/ Microsoft Windows	2 credits	GSF 034	Pediatric Assessment	3 credits
GSC 001	Purchasing Agent Training	1 credit	GSF 037	Rehabilitation Nursing	5 credits
GSC 003	Purchasing & Materials Management	3 credits	GSF 040	EKG Interpretation	1 credit
GSC 544-	National Executive Housekeeper Association (each)	1 credit	GSF 041	Psychiatric Medication Update	1 credit
GSC 566	Certification Program		GSF 046	12-Lead ECG Interpretation	1 credit
GSF 001	Basic Nurse Assistant Training	6 credits	GSF 050	Psychiatric Nursing Update	1 credit
GSF 016	Current Nursing Practices Update	7 credits	GSF 051	Current Gerontological Issues/Nursing	2 credits
GSF 019	Current Gerontological Issues in Nursing	.5 credit	GSH 017	MLT Certification Review	1.5 credits
			GSK 007	Letter & Sign Painting I	2 credits
			GSK 009	Private Pilot Ground School	3 credits
			GSK 010	Travel Agency Training	3 credits
			GSK 011	Advanced Travel Agency Training	3 credits
			GSK 012	Airline Computer Training	1.5 credits
			GSK 017	Letter & Sign Painting II	2 credits
			GSK 040	Woodworking/Furniture Making	2 credits
			GSK 041	Advanced Woodworking/Furniture Making	3 credits
			GSK 500	Introduction to Horse Management	2 credits
			GSK 501	Horse Judging & Selection	2 credits
			GSK 502	Horse Health & Disease	2 credits
			GSK 503	Horse Nutrition	2 credits
			GSK 504	Horse Breeding & Genetics	2 credits
			GSK 505	Horse Marketing	2 credits
			GSL 003	Introduction to Medical Spanish	1 credit
			GSL 004	Medical Spanish	1 credit
			GSN 001	Modern Office Procedures	2 credits
			GSN 002	Re-Entering Today's Office	2 credits
			GSN 003	Typing Refresher	3 credits
			GSN 004	Basic Typing	3 credits
			GSN 032	Typing on Computer	2 credits
			GSS 017	Stained Glass/Beginning	1.5 credits
			GSS 018	Stained Glass/Advanced	1.5 credits
			GSS 501	Calligraphy/Beginning	1 credit
			GSS 502	Calligraphy/Advanced	1 credit
			GSS 825	Photography/Introduction	1.5 credits
			GSV 817	Tailoring	2 credits
			GSV 825	Home Landscaping	1 credit
			GSV 828	Upholstering	3 credits



Facilities and Extension Locations

Facilities and Extension Locations

On the main campus

Students enrolled in classes for the first time at the College of Lake County in September, 1969. At that time, the facilities on the 230-acre main campus consisted of the buildings which now make up the North Campus. The main building was completed in 1974, and a Learning Resource Center was added to it in 1980. Since that time, the college has added a Physical Education Building in 1982 and the Science/Student Services Module in 1987. The college's growth reflects its commitment to excellence and the support which the people of Lake County have given it.

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 **Physical Education Building** houses physical education, intramural, and inter-collegiate athletic activities. At regularly scheduled times when the gym is not being used, currently enrolled CLC students may use the field house and the weight room for recreation and exercise. Outside the P.E. 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 outside the formal classroom setting. The Recreation Room and Lancers, located in the lower level of Module B in the main building, allow students to enjoy billiards, table tennis, foosball, and electronic games, while others enjoy refreshments and occasional entertainment in Lancers. The College Bookstore is also on this level.

An 80,000 square foot **Science/Student Services** addition to the main campus opened in spring, 1987. This new module houses facilities for biology, chemistry and

medical records technology classrooms, laboratories and preparation areas, student service offices, a conference center, and a 400-seat auditorium. A new 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.**

Food Service

Lancers, a deli-style restaurant is located in the Commons area of the main building, near the Bookstore. The menu includes many varieties 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. to 8:30 p.m.; Fridays 7:00 a.m. to 3:00 p.m.

The Willow Room restaurant is also located on the main 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 coffee 7:00 a.m. to 4:00 p.m and lunch Monday through Friday from 11:00 a.m. to 1:30 p.m.

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.

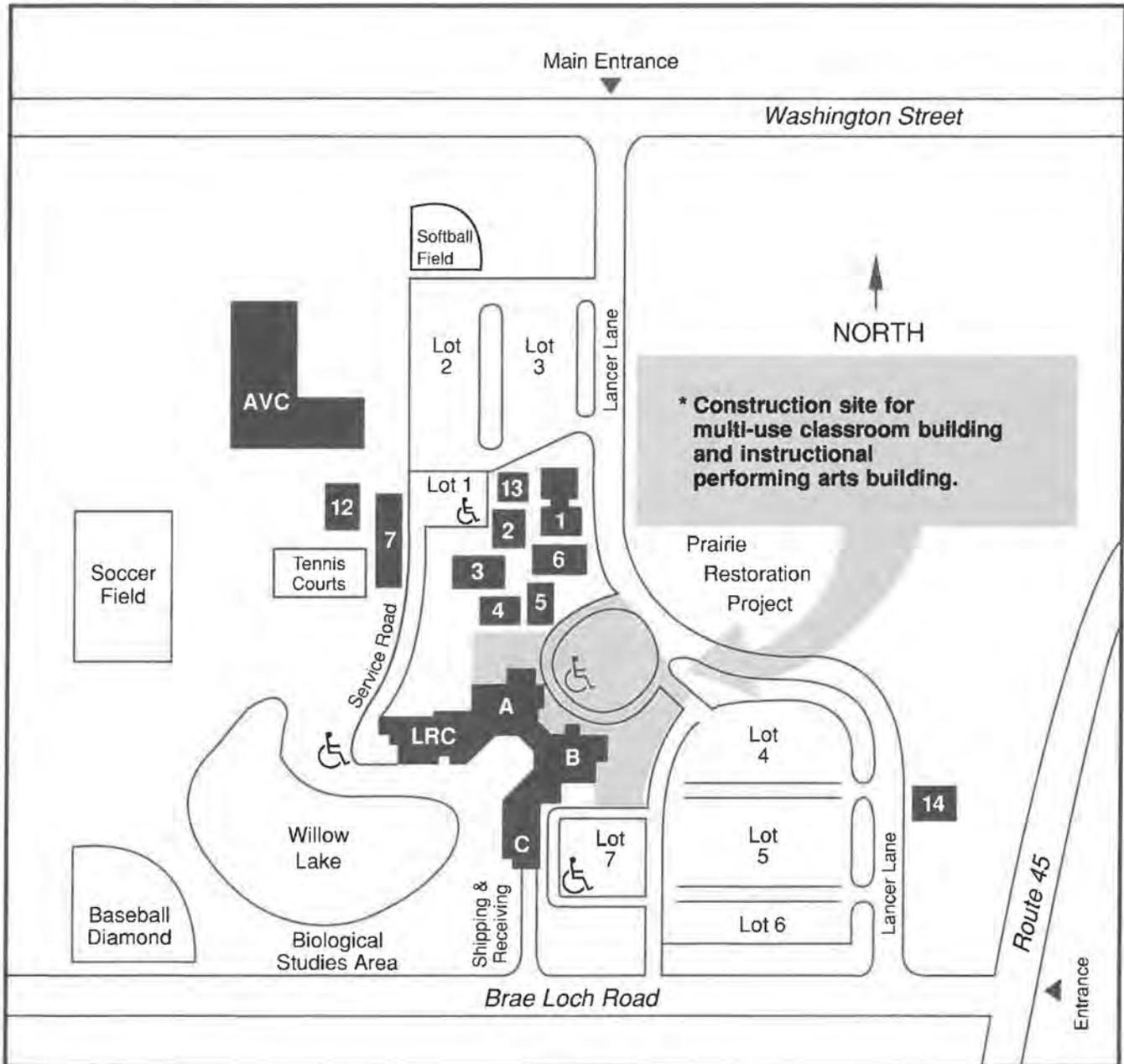
Lakeshore Campus

Monday-Thursday	7:30 a.m.-10:00 p.m.
Friday	7:30 a.m.-8:30 p.m.
Saturday	8:00 a.m.-4:30 p.m.

Southlake Educational Center

Monday, Tuesday, Wednesday, Friday	8:30 a.m.-5:00 p.m.
Thursday	8:30 a.m.-8:00 p.m.

CLC Campus Map



LEGEND

Building

- A, B & C - Administrative Offices & classrooms
- AVC - Area Vocational Center (Automated Industrial Center)
- LRC - Learning Resource Center
 - 1 - General Classrooms
 - 2 - Refrigeration/Welding
 - 3 - General Classrooms
 - 4 - General Classrooms
 - 5 - Music/Theatre
 - 6 - Nursing

- 7 - Health & Physical Education
- 12 - Automotive Technology
- 13 - Child Care Center
- 14 - Ornamental Horticulture

Parking Lots

- Student & Visitor - Lots 2, 3, 4*, 5 & 6
- Staff - Lots 1 & 7
- * A portion of Lot 4 is also designated for staff parking.

Facilities and Extension Locations

Lakeshore Campus

The College of Lake County Lakeshore Campus (LSC) offers students a variety of educational options 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 advisement, academic support through the Learning Assistance Center, and counseling.

The Lakeshore Campus is open Monday through Thursday 7:30 a.m. to 10:00 p.m., Friday 7:30 a.m. to 8:30 p.m., and Saturday 8:00 a.m. to 4:30 p.m. For more information call 623-8686. The Lakeshore Campus is located at 111 N. Genesee Street, Waukegan, Illinois.

Parking: There is limited metered one hour parking in front of the LSC. For parking more than one hour, use the city lots located on Clayton Street and Sheridan Road. From the Clayton Street lot you can enter the building through the back door, using the stairway from the parking lot and proceeding south to the LSC. There is additional parking in the lot located at Sheridan Road and Madison Street. Entrance to this lot is on Sheridan Road. Parking in city lots costs 50¢ for 1 hour, and 75¢ for 1½ hours.

Textbooks: Textbooks are available at the Lakeshore Campus for students enrolled in courses at the Lakeshore Campus and at Waukegan West, Zion-Benton and Warren high schools. Books may be purchased during the first two weeks of classes from 9:00 a.m. to 1:00 p.m. and from 5:00 p.m. to 9:00 p.m. Monday through Thursday and 9:00 a.m. to 1:00 p.m. on Friday.

Southlake Educational Center

The Southlake Educational Center (SEC) in Highland Park serves the southeast and southwest portion of Lake County. SEC offers a wide range of services including registration, student advisement, basic skills testing and career counseling. On-site registration is conveniently located at various sites in southeast and southwest communities. 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 credit courses at Adlai Stevenson, Highland Park, Deerfield, Lake Zurich and Wauconda high schools. A wide variety of non-credit courses and cultural events are also available throughout the southeast and southwest area. The courses provided at SEC and the high school extensions are designed for adults who are seeking career change, further education, or personal development.

Textbooks may be purchased at Southlake Educational Center during the first two weeks of classes for students enrolled in courses at Deerfield and Highland Park high schools and the Highland Park Senior Center. Books are available during SEC normal operating hours: 8:30 a.m. to 5:00 p.m. Monday through Friday.

Textbooks for Adlai Stevenson, Lake Zurich and Wauconda high schools are available for purchase on-site, during the **FIRST TWO WEEKS** of class, from 6:00 p.m. to 8:00 p.m. **ONLY!** For more information call 433-7884.

Great Lakes Naval Base Extension

The College of Lake County maintains an office at Great Lakes Naval Base to give service members, their families and members of the surrounding community an opportunity to work towards an associate degree. Evening courses are offered in the traditional 16-week semester and the condensed eight-week format, allowing students to complete many of the general education requirements.

Services offered at Great Lakes extension include registration (in-person only), advisement, 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 benefits of the main campus are open to extension site students. Non-military students must obtain a base pass prior to start of class.

Great Lakes Extension is located in Building 2, Navy Campus. Office hours are 8:30 a.m. to 4:00 p.m. Monday through Thursday, Friday by appointment only. For more information call 688-2365.

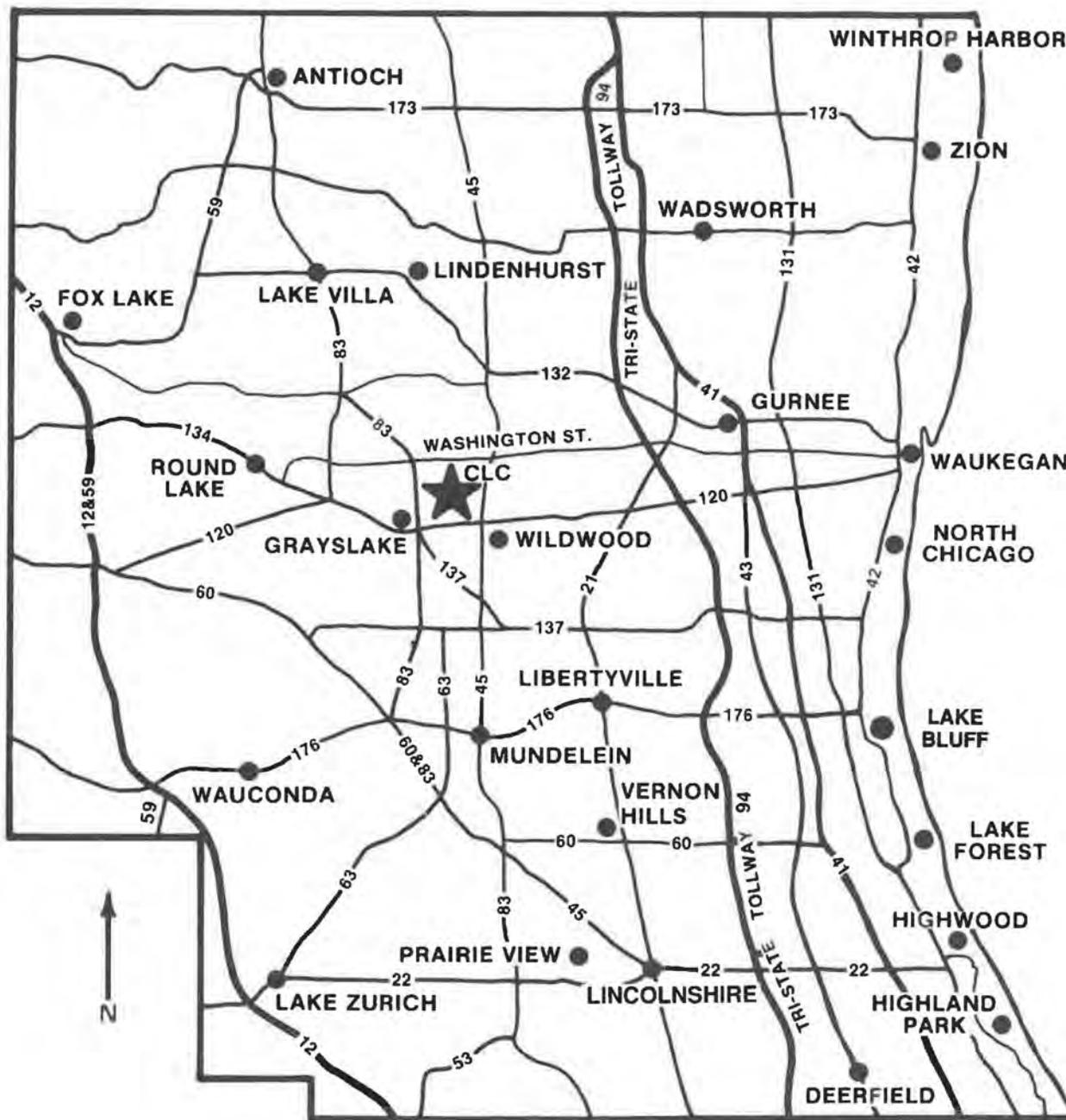
Additional Extension Sites

The college also frequently offers classes at the following locations:

Adlai Stevenson High School	Prairie View
Antioch Community High School	Antioch
Area Vocational Center	Grayslake
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 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



Full Time Faculty, Professional, Specialist and Administrative Staff

ADAMS, NEDRA

Speech
B.S., Eastern Michigan University
M.A., Eastern Michigan University

AGUINALDO, TERESA G.

English
B.A., University of Missouri-Columbia
M.A., University of Missouri-Columbia

AKEN, IRENE *

Library Processing Technician
B.S., University of Wisconsin-Stout

ALLEN, ANN McKAIN

Graphic Designer
B.A., Emporia State University

ALVIS, SANDRA R.

Engineering Division Assistant/
Academic Advisor
B.S., Northern Michigan University
M.B.A., Meredith College

ANASTASIO, DENISE J.

Health Information Technology
B.A., University of Wisconsin-
Parkside
R.R.A., Seattle University
M.P.A., University of Wisconsin-
Parkside

ANDERSON, GARY WILLIAM

Criminal Justice, Sociology
B.A., Buena Vista College
M.A., University of Iowa

ANDERSON, ROGER L.

Data Processing
B.S., Michigan State University
M.S., University of Missouri

ANDRESEN, SHARRON

Family Literacy Coordinator
B.S., Bemidji State University
M.S., Northern Illinois 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

BAILEY, LEWIS

Refrigerator/Air-Conditioning/Heating
B.S.E., University of South Dakota

BALLOCK, WILLIAM J. *

Associate Dean, Engineering,
Mathematics, and Physical Sciences
Division
B.S., Indiana State University
M.S., Indiana State University

BARLOW, PAMELA

Procurement Assistance Consultant
B.S., University of Wisconsin

BARON, JUDITH

Radiography
B.S., Northeastern Illinois University
M.S., Northeastern Illinois University

BEAUDOIN, JAMES

Assistant Director
Information Systems

BECK, DAVID

Counselor
B.A., Ripon College
M.S., Indiana University

BECKWITH, JO

Reference Librarian
B.A., MacMurray College
M.S.L.S., University of Illinois

BEITEL, DOUGLAS M.

Drafting
CAD Drafting Technology
Architectural Technology
Building Construction Technology
B.S., Southern Illinois University
M.S., Southern Illinois University

BENASSI, MARIO A.

Psychology
B.S., University of
Wisconsin-Parkside
M.A., DePaul University
Ph.D., DePaul University

BENTLEY, NANCY

Director, Counseling
B.A., Kent State University
M.Ed., Kent State University

BERRYMAN, TERRI

Director, Career & Placement Services
B.S., Western Kentucky University
M.A., Northeast Missouri State
University

BETTENHAUSEN, RUTH

Director, Business Services
B.S., University of Illinois-Urbana
M.B.A., University of Illinois-Urbana

BIRD, JOHN

Career Development Specialist
B.A., Beloit College

BOND, RUTH

Data Processing
A.A.S., Purdue University
B.S., Southern Illinois University

BOYKE, DAVID A.

Laboratory Assistant, Engineering
A.S., College of Lake County
B.S., University of Wisconsin-
Whitewater

BRASILE, CANDACE *

Physical Education
B.S., University of
Wisconsin-Superior
M.A., Central Michigan University

BRASILE, ROBERT J.

Chemistry
B.A., Knox College
M.A.T., University of Iowa
D.A., University of Illinois-Chicago

BROWN, WENDY

Division Assistant/Academic Advisor
Social Science Division
B.A., Northern Illinois University
M.A., Temple University

BUCHHOLZ, MADGE

Director, College Bookstore
B.A., Lake Forest College

BUCHTA, TOM L.

Dean, Learning Resource Center
B.S., Indiana State University
M.L.S., Rosary College

BUDD, II, TALMAN C.

Associate Dean,
Economic Development
B.A., Middlebury College
M.A., Pepperdine University

BULAKOWSKI, CAROLE

Director, Learning Assistance Center
B.A., Marygrove College
M.A., Eastern Michigan University
Ph.D., Loyola University

Full Time Faculty, Professional, Specialist and Administrative Staff

BYRNE, MARY C.

Library Circulation Supervisor
B.S., Illinois State University

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

CASE, DIANE

Financial Aid Assistant
A.A., College of Lake County
B.A., University of Wisconsin-Parkside

CEDERBERG, ARLENE

Secretary to the President
Certified Professional Secretary
A.A.S., College of Lake County

CHARUHAS, MARY S.

Associate Dean, Adult Continuing
Education & Extension
Services Division
B.A., Indiana University
M.S.Ed., Northern Illinois University

COBB, JR., ARTHUR

Director, Regional Small Business
Development Center
B.S., Fisk University
M.A., National-Louis University

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

COOK, NANCY W.

Art
A.B., Brown University
M.A.T., Brown University

CORN, MICHAEL J.

Associate 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.

Division Assistant/Academic Advisor
Biological and Health Sciences
A.A., College of Lake County
B.A., Northeastern Illinois University
M.A., Northeastern Illinois University
National Certified Counselor

COTE, JACK D. *

Biology
B.S., University of Notre Dame
M.A., Ball State University

COTTON, JOHAAN

Special Projects Coordinator

CRANE, CAROL W.

Testing Center Supervisor
B.A., Northeastern Illinois University
M.A. Webster University

CUMMINS, RODNEY

Automotive Technology
A.A.S., Ferris State College
B.S., Southern Illinois University
M.S., Southern Illinois University
Certificate, Ferris State College

CURTIS, LINDA W.

Biology
B.S., University of Wisconsin-
Stevens Point
M.S., University of Wisconsin-
Milwaukee

CURTIS, LYNNE E.

English
B.A., Augustana College
M.A., University of Chicago

DARLING, JANICE

Business Learning Center
Instructional Assistant

DAWSON, CAROL

Program Specialist
B.A., Northern Illinois University
M.A., Northern Illinois University

DAWSON, ROBERT

Sociology
B.A., Florida State University
M.S., Florida State University

DENNY, CURTIS L.

Director, Admission and Records
B.A., Southern Illinois University
M.S., Southern Illinois University

DEVERY, PENNE P.

Communication Arts
B.S., University of Wisconsin
M.A., Marquette University
Ph.D. Marquette University

DIGILIO, JERRY W.

Computer Aided Design
Computer Aided Manufacturing
B.S., Northern Illinois University

DONAHUE, ALICE K.

Division Assistant/Academic Advisor
Communication Arts Division
B.S.Ed., Mount Mary College
M.S.Ed., DePaul University

DORSEY, JAMES W.

Sociology
B.A., Carthage College
M.A., Roosevelt University

DRAKE, DOROTHY REGAN

Dean, College Advancement
B.A., Western Illinois University
M.S., National College of Education

DUDE, JOANNE ANTON

Associate Degree Nursing
B.S.N., University of Illinois
M.S.N., Governors State University
Gerontology Certificate
University of Illinois-Chicago
R.N.C.S., American Nurses Association

DULMES, STEVEN L.

CAD CAM
B.S., Purdue University

DUNN, MARY

Communication Arts
B.S., University of Dayton
M.A., Cardinal Strich College
M.A., University of Illinois-Chicago

DURNBAUGH, TANA

Associate Degree Nursing
B.S.N., Medical College of Virginia
M.S., Northern Illinois University
Ed.D., Northern Illinois University
R.N.C.S., American Nurses Association

Full Time Faculty, Professional, Specialist and Administrative Staff

EASTBURG, RITA

English
B.S., Boston College
M.A., University of Michigan

EDMONDS, L. PIERRE

Student Enrollment Specialist
B.A., Western Illinois University

EINHORN, ROBERT

Director, Information Systems
B.A., Northeastern University

EVELAND, LAURA K.

Child Care Class Facilitator
A.A.S., College of Lake County

EWING, CAROLE L.

Regional Coordinator, Extension Services
A.A., College of Lake County
B.A., Columbia College

FINKE, JASON

Purchasing Agent
B.S., Bowling Green State University

FINNEGAN, ROBERT F.

Librarian
B.Ed., Chicago Teachers College
M.S.Ed., Illinois Teachers College
M.A., Northern Illinois University

FORCIER, RONALD LEROY

Director, Machine Packaging
Technician Program
B.S., Southern Illinois University
at Carbondale
M.B.A., Keller Grad School of
Management

FORREST, JOHN

Campus Printing Service Supervisor

FRANCIS, VICKI

Associate Degree Nursing
B.S.N., Mankato State College
M.S.N., Northern Illinois University

FREITAG, WILLIAM

Coordinator, Special Needs
A.A., College of Lake County
B.A., Northeastern Illinois University
M.A., Northeastern Illinois University
M. Ed., University of Illinois at Chicago

FRYXELL, JAMES R.

Mathematics
A.B., Augustana College
M.S., University of Illinois

GALLO, MARGARET

Health Information Technology
B.S., Calumet College of St. Joseph
R.R.A., Stephens College

GARROSS, EDWARD ROGER

Automotive Technology
B.S., Indiana State University

GEE, MARY KAY

Workplace Literacy Coordinator
B.A., University of Iowa

GEHLE, MARVIN H.

Chemistry Lab Supervisor
B.S., University of Nebraska
M.S., University of Nebraska
Ph.D., Iowa State University

GENTRY, CURTIS

Physical Education
B.S., Maryland State College
M.A., Northwestern University

GERTSCHEN, GLEN G. *

Speech
B.S., University of Wisconsin
M.S.T., University of Wisconsin

GIFFORD, FRED

Speech
B.A., University of Wisconsin-Milwaukee
M.A., University of Wisconsin-Milwaukee

GLENNON, EIBHLIN

English, Theatre
B.A., Mundelein College
M.A., University of Illinois
M.A., Northwestern University

GONDER, PATRICK F.

English, Humanities
B.A., University of Missouri
M.A., University of Missouri

GOODE, VICKIE

Support Services Liaison
B.A., Northern Illinois University
M.Ed., Loyola University

GORDON, GREGORY M.

History
B.S., Illinois State University
M.S., Illinois State University
M.A., Northwestern University

GROENINGER, DAVID

History
B.A., Northern Illinois University
M.A., Concordia University of Montreal

GROENINGER, SANDRA K.

Child Care Class Coordinator
B.A., Northern Illinois University
M.S., Northern Illinois University

GROVE, SHARON A.

Accounting
B.S., University of Wisconsin-
Whitewater
M.S., Northern Illinois University
Ph.D., Illinois State University

GUDONIS, ROBERT

CAD Laboratory Technician

GUNDRUM, ANTHONY

Electrical/Electronics Technologies
A.A.S., Milwaukee Area Technical
College
B.S., University of Wisconsin-Stout
M.S., University of Wisconsin-Stout

HAAS, JAMES, R.

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B.S., Indiana University
M.S., Indiana University
National Certified Counselor

HABERKORN, WAYNE

Dean, Business Services
and Finance
B.S., Carthage College
M.P.A., Roosevelt University

HAGEN, NIKKI

Associate Degree Nursing
B.S.N., University of Colorado
M.S., Northern Illinois University

HALL, BARBARA

Literacy Coordinator
B.S., University of Wisconsin

HAMILTON, ROBERT W.

Chemistry
B.S., Northern Illinois University
M.A.T., Indiana University

HAMM, RUSSELL E.

Dean of Instruction, Career
and Technical Education
B.S., Western Illinois University
M.A., Northern Illinois University
Ph.D., University of Illinois-Chicago

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HANSON, GENE D. *

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and Athletics Division
B.S., Southern Illinois University
M.S., Southern Illinois University

HANSON, JERRY E.

Anthropology and Sociology
B.A., Northern Illinois University
M.A., Northern Illinois University
Ph.D., University of Wisconsin-
Milwaukee

HARLOW, DONALD

Export Development Specialist
B.S., University of Denver

HASLOW, SHIRLEY

Reference Technician
A.A.S., Gateway Technical Institute

HASSETT, JACQUELYN

Director, Health Center
R.N., C, Certified in College Health
Nursing
R.N., St. Anthony de Padua School
of Nursing
B.S., Barat College
M.S., George Williams College

HAUCA, ANNE

Project Coordinator, National
Workshop Literacy Program
B.B.E., Eastern Michigan University

HEINRICH, THOMAS

Director, Personnel
B.A., DePaul University
M.A., DePaul University

HENRY, ONEIDA

Project SUCCEED Coordinator
Certificate, University of Wisconsin
B.A., Northeastern Illinois University

HERNANDEZ, ALICE

Student Enrollment Specialist
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HERNANDEZ, SHERRY

Associate Degree Nursing
B.S.N., University of Illinois
M.S., DePaul University

HICKMAN, SCOTT

Anatomy and Physiology,
Environmental Biology
B.S., Illinois State University
M.S., Illinois State University
Ph.D., University of Illinois-Chicago

HINKLEY, JERRY L.

Biology, Botany and Microbiology
B.S., Southern Illinois University
M.A., Southern Illinois University

HODGE, JAMES L.

Mathematics
B.S., Eastern Illinois University
M.S., University of Notre Dame

HOEKSTRA, THOMAS E.

Music
B.M., Wheaton College
M.M., Indiana University
Ph.D., University of Iowa

HOLLAND, DONALD R.

Associate Dean, Business Division
B.S., Northern Illinois University
M.B.A., Northern Illinois University

HOLMES, ANTHONY

Ceramics
B.A., Southern Illinois University
M.F.A., Southern Illinois University

HOPKINS, LESLIE

Philosophy/Humanities
B.A., MacMurray College
M.A., Arizona State University

HORNING, LEE-ANN

Writing Center Specialist
B.A., Valparaiso University
M.A., DePaul University

HOY, TRACEY

Mathematics
B.S., Elmhurst College
M.S., Northern Illinois University

HUDSON, JACK W.

Electronics/Electrical Technologies
B.S.E.E., University of Illinois
M.S., Northern Illinois University

HUNT, CHRISTINE

Associate Degree Nursing
A.B., University of Illinois
M.S.N., New York Medical College
M.S., Northern Illinois University

HUNTSINGER, CAROL S.

Psychology, Human Services
B.S., University of Minnesota
M.Ed., National-Louis University
Ph.D., Loyola University-Chicago

HUSS, CHARLES

Data Processing
M.B.A., Lake Forest School
of Management
M.A., Webster University

HYSAW, MINNIE J.

Assistant Director, Personnel/
Affirmative Action Officer
B.S., Memphis State University
M.Ed., Memphis State University
Ph.D., Southern Illinois University
at Carbondale

INFANTINO, STEPHEN

Philosophy
B.A., St. Mary of the Lake
S.T.L., Gregorian University, Rome
M.A., University of Chicago
Ph.D., University of Chicago

JACKSON, J. L.

Philosophy/Logic/Critical Thinking
B.A., DePaul University
M.A., University of Chicago

JANSTA, PEGGY

Traffic Safety Program Coordinator
B.A., Carthage College

JOHNSON, CECILIA

Counselor
B.A., Northeastern Illinois University
M.A., Northeastern Illinois University

JOHNSON, DARRYL L.

Chemistry
B.S., Mankato State University
M.A., Mankato State University

JOHNSON, JOE W. *

French
B.S., Ed., Northwest Missouri
State University
M.A., University of Iowa

JOHNSON, MARVIN L.

Mathematics
B.S., Wheaton College
M.A., Oakland University
Ph.D., University of Illinois-Chicago

KANWISCHER, EDMOND *

Art
B.F.A., University of Illinois
M.F.A., University of Colorado

KAPLAN, REVA

Grants Specialist
B.A., University of Minnesota
M.A., Northeastern Illinois University

Full Time Faculty, Professional, Specialist and Administrative Staff

KARTJE, JEAN V.

Executive Assistant to the President
B.A., Barat College
M.A., Webster University

KENT, ARTHUR

Vice-President, Administrative Affairs
B.S., Northwestern University
M.S., Northern Illinois University

KERR, JOAN S.

Psychology
B.A., Miami University
M.A., Northwestern University
Ph.D., Northwestern University

KERR, ROBERT WALTER

Economics
B.S.F.S., Georgetown University
M.S., University of Illinois

KEUSS, GLENN

Mechanical Engineering Technology
B.S., Washington University
M.S., University of Wisconsin

KILLEN, RICHARD

Biology
B.S., Southern Illinois University
M.S., University of Illinois
D.A.(Sc), University of Illinois

KNIEST, WILLIAM J.

AV Production Coordinator
B.F.A., Kansas City Art Institute
M.S., Institute of Design, I.I.T.

KROLL, JERRY A.

Welding Technologies Coordinator
B.S., Illinois State University
M.S., Illinois State University
C.W.I., American Welding Society

KRUMM, DIANE

Psychology
B.S., Northern Illinois University
M.S., Southern Illinois University

KUCHERA, MICHAEL E.

Sociology, Psychology
B.A., Bemidji State University
M.S., Mankato State University
Ph.D., Loyola University

KYRIAKOS, CHRISTOPHER P.

Audio Visual Equipment Coordinator
Certificate, College of Lake County
A.A.S., College of Lake County

LABATT, JR, ARTHUR

Engineering, Mathematics and Physical
Sciences
Computer Lab Assistant
A.A.S., College of Lake County
A.A.S., College of Lake County
B.S., St. Louis University

LAGOS-PRESS, LITSA

Business Management
B.A., Wittenberg University
M.B.A., Wright State University

LARSON, TERRY A.

Biology
B.A., Monmouth College
M.S., Illinois State University
Ph.D., Illinois State University

LaVISTA, DANIEL J.

President
B.A., Siena College
M.A., University of Dayton
Ph.D., Syracuse University

LECKMAN, JEROLD

Construction Technologies
B.S., University of Illinois
M.S., University of Illinois
Ph.D., University of Illinois
Illinois Registered Professional
Engineer
Illinois Professional Land Surveyor

LECRAW, NANCY

Counselor
A.B., Cornell University
M.A., Michigan State University
National Certified Counselor

LEE, PECK

Math Center Specialist
B.S., University of Iowa

LEIBMAN, SUZANNE

English as a Second Language
B.A., Beloit College
M.A., Northeastern Illinois University

LEICHT, JANE, MT (ASCP)

Medical Laboratory Technology
B.S., Marquette University
M.Ed., University of Illinois-Urbana

LELO, AL

Computer Operations Manager
A.A., College of Lake County

LEWIS, LORRAINE

Communication Arts Computer Specialist
A.A., College of Lake County

LEY, MARTIN

English
B.A., Humboldt State University
M.A., Eastern Washington University

LIU, GEORGE

English
B.A., Xian Foreign Languages
University, China
M.A., Bowling Green State University

LLOYD, DONALD

Horticulture
A.A.S., State University of New York
B.S.A., University of Georgia
M.S., University of Georgia

LOEB, ANNE M.

Chemistry
B.S., City College of New York
M.S., Boston University

LOMBARD, THOMAS E.

Office Systems & Technology
B.B.A., Wisconsin State University
M.S.Ed., Northern Illinois University

LOPEZ, SAM

Student Development Mentor Specialist

LoPRESTI, LAUREN

Office Systems and Technology
B.S., DePaul University
M.S.Ed., DePaul University

LOWRY, KEVIN

Director, Campus Safety
A.S., Clark State College
B.S., Ohio State University
M.B.A., Wright State University

LUMBER, JOHN W.

History
Associate Dean, Social Science
Division
B.S., Marquette University
M.A., Marquette University

LYMAN, ROSS C.

Mechanical Engineering Technology
B.S., University of Illinois
M.S., University of Illinois
Illinois Registered Professional
Engineer

MACK, BRUCE

Music
Director of Bands
B. Mus. Ed., Illinois State University
M. Mus., Illinois State University
Ad. Cert. Mus. Ed., Univ. of Illinois

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 - Academic Calendars 3,4
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 - Accounting, Associate in Science Degree..... 40
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- B**
- Biological Sciences, Associate in Science Degree..... 42
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 - Economics, Associate in Arts..... 44
 - Economics courses..... 120
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- O**
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- Office Automation Specialist
Certificate 90
- Office Systems Technology
Program 88
- Office Systems Technology
courses 109
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- P**
- Personal Development courses 154
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- Philosophy, Associate in Arts 51
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- Physical Education, Associate
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- Physical Education Building 168
- Physical Education courses 155
- Physical Education Credit 32
- Physics, Associate in Science 52
- Physics courses 157
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Life 25
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Academic Concerns 26
- Political Science, Associate in
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1994 Fall Semester

August	15-20	Faculty and Staff Advisement, Registration and Staff Development Week
August	22	Classes begin
September	5-6	Labor Day Recess (no classes)
October	18	Mid-Semester
November	23-27	Thanksgiving Recess (no classes)
December	2	Last Day to Remove "I" Grade from Spring Semester or Summer Session, 1994
December	12-18	Final Exams
December	18	Semester Ends

1995 Spring Semester

January	17-21	Faculty and Staff Advisement, Registration and Staff Development Week
January	23	Classes Begin
March	19	Mid-Semester
March 27- April	April 2 28	Spring Vacation (no classes) Last Day to Remove "I" Grade from Fall Semester 1994
May	15-21	Final Exams
May	20	Commencement
May	21	Semester Ends

1995 Summer Session

June	12	Classes Begin
July	4	Independence Day Holiday (no classes)
July	9	Mid-Session
August	5	End of Session

1995 Fall Semester

August	21-26	Faculty and Staff Advisement, Registration and Staff Development Week
August	28	Classes Begin
September	4-5	Labor Day Recess (no classes)
October	24	Mid-Semester
November	22-26	Thanksgiving Recess (no classes)
December	1	Last Day to Remove "I" Grade from Spring Semester or Summer Session, 1995
December	18-22	Final Exams
December	22	Semester Ends

1996 Spring Semester

January	16-20	Faculty and Staff Advisement, Registration and Staff Development Week
January	22	Classes Begin
March	18	Mid Semester
March	25-31	Spring Vacation (no classes)
May	3	Last Day to Remove "I" Grade from Fall Semester 1995
May	13-19	Final Exams
May	18	Commencement
May	19	Semester Ends

1996 Summer Session

June	10	Classes Begin
July	4	Independence Day Holiday (no classes)
July	8	Mid-Session
August	4	End of session

Where to Get Answers for Your Questions

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: or	Stop by:
Activities	223-3609	C104
Admissions	223-6601 x2573	B101a
Adult Education	223-3635	Building 4
Advisement	223-6601 x2572	C110
Affirmative Action	223-6601 x2216	B146
Athletics	223-3600	Building 7
Biological & Health Sciences Division	223-6601 x2445	C140
Bookstore	223-3604	B1
Business Division	223-6601 x2515	A144
Career Programs	223-6601 x3614	B201
Communication Arts, Humanities & Fine Arts Division	223-6601 x2550	B237
Continuing Education	223-3616	Building 4
Cooperative Education	223-3611	B201
Counseling	223-6601 x2572	C110
Dial-An-Event	223-3607	C104
Economic Development	223-3615	B201
Engineering, Mathematics & Physical Science Division	223-6601 x2498	B162
Extension Services	223-6601 x2470	Building 4
Financial Aid	223-3610	B114
Health, Physical Ed., Intramurals, Recreation & Athletics Division	223-3600	Building 7
Health Center	223-3605	A149
International Students and International Education	223-6601 x2733	A233, A237 or A238
Job Placement	223-3611	B201
Learning Assistance Center	223-3613	Learning Resource Center
Learning Resource Center/Murphy Library	223-3618	Learning Resource Center
Public Relations	223-3622	A108
Registration	223-1111	B101
Social Science Division	223-6601 x2532	A244
Testing Center	223-3613	Learning Resource Center
Tuition Payment	223-6601 x2229	A101
Veteran's Information	223-3608	B114

Off-Campus Centers

Great Lakes Extension Office	688-2365	Building 2, Room 2, Great Lakes, IL 60088
Southlake Educational Center	433-7884	1860 First Street, Highland Park, IL 60035
Lakeshore Campus	623-8686	111 North Genesee Street, Waukegan, IL 60085

19351 West Washington Street • Grayslake, Illinois 60030-1198 • Main number: (708) 223-6601

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:

WBBM	780 AM	WMAQ	670 AM	WZSR	105.5 FM	WLS-TV—Channel 7
WGN	720 AM	WLS	890 AM	WXLC	102.3 FM	WFLD-TV—Channel 32
WKRS	1220 AM	WIL	95.1 FM	WUSN	99 FM	
WLIP	1050 AM	WVXX	103.1 FM	WLS	94.7 FM	

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!***



**Join us in celebrating
our 25th Anniversary!**

Admission Requirements

The College of Lake County (CLC) welcomes all individuals who can benefit from the courses and programs of study offered by the College, including those who are high school graduates, others 18 years of age and older, and individuals less than 18 years of age who meet established criteria.

Admission to the College does not ensure entrance into a particular course or program of study. 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.

The College has three (3) admission categories for new students:

Admission Category I includes those students who have provided evidence of college-level reading, writing, and mathematical skills as a prerequisite for enrollment in courses designated as requiring those skills.

The following credentials are required:

1. Completed CLC Application for Admission form.
2. If less than 18 years of age, either a completed CLC Secondary School Reference form or an official transcript of high school record showing date of graduation/withdrawal.
3. ONE of the following records to demonstrate basic reading, writing, and mathematical skills:
 - 3.1 Official transcript of high school record showing top 1/3 rank in class after six semesters.
 - 3.2 Official transcript of an accredited college/university record listing at least 30 semester hours of credit with no grade less than "C" or credit equivalent to the following or higher level courses at CLC:
Reading: ENG 107 - Introduction to College Reading.
Writing: ENG 105 - Introduction to College Writing.
Math: MTH 101 - Elementary Concepts of Mathematics.
 - 3.3 CLC Basic Skills Assessment scores as follows:
Reading: Score of 38 or above.
Writing: Score of 40 or above.
Math: Score of 20 or above.
 - 3.4 American College Test (ACT) standard scores as follows:
Reading: Score of 14 or above in Social Science.
Writing: Score of 14 or above in English.
Math: Score of 14 or above in Mathematics.
 - 3.5 Scholastic Aptitude Test (SAT) standard scores as follows:
Reading: Verbal Score of 400 or above; or Reading Comprehension score of 40 or above.
Writing: Verbal Score of 400 or above; or Test of Standard Written English (TSWE) score of 40 or above.
Math: Math Score of 400 or above.
 - 3.6 Official transcript of General Educational Development (GED) tests (English Language Version) listing standard scores as follows:
Reading: Score of 55 or above in Reading Skills.
Writing: Score of 55 or above in Writing Skills.
Math: Score of 55 or above in Mathematics.
 - 3.7 Evidence of an Associate or higher degree from an accredited college or university.

Admission Category II includes those students who have provided evidence of basic reading, writing, and mathematical skills which demonstrates that they can benefit from enrollment in skill enhancement courses.

The following credentials are required:

1. Completed CLC Application for Admission form.
2. If less than 18 years of age, either a completed CLC Secondary School Reference form or an official transcript of high school record showing date of graduation/withdrawal.
3. ONE of the following records to demonstrate basic reading, writing, and mathematical skills:
 - 3.1 CLC Basic Skills Assessment scores as follows:
Reading: Score of 37 or below.
Writing: Score of 39 or below.
Math: Score of 19 or below.
 - 3.2 American College Test (ACT) standard scores as follows:
Reading: Score of 13 or below in Social Science.
Writing: Score of 13 or below in English.
Math: Score of 13 or below in Mathematics.
 - 3.3 Scholastic Aptitude Test (SAT) standard scores as follows:
Reading: Verbal score of 399 or below; or Reading Comprehension score of 39 or below.
Writing: Verbal score of 399 or below; or Test of Standard Written English (TSWE) score of 39 or below.
Math: Math score of 399 or below.
 - 3.4 Official transcript of General Educational Development (GED) tests listing standard scores as follows:
Reading: Score of 54 or below in Reading Skills.
Writing: Score of 54 or below in Writing Skills.
Math: Score of 54 or below in Mathematics.

Admission Category III includes those students who will limit their enrollment to courses which do not require evidence of prerequisite reading, writing, and mathematical skills with the exception that students in this category may enroll for a total of not more than two (2) courses which require college-level reading, writing, and mathematical skills but for which students have met all other prerequisites.

The following credentials are required:

1. Completed CLC Application for Admission form.
2. If less than 18 years of age, either a completed CLC Secondary School Reference form or an official transcript of high school record showing date of graduation/withdrawal.

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.



COLLEGE OF LAKE COUNTY

Programs of Study

Please choose the subject that you are most likely to study in your education plan at CLC. Write the code and name in the space provided on the application form.

BIOLOGICAL SCIENCE

CODE TITLE

ADN	Registered Nursing
BIO	Biology/Botany/Zoology
CHM	Chemistry
HIT	Health Information Technology
HRT	Horticulture
MED	Pre-Dent/Pre-Med/Pre-Phar/Pre-Vet
MIM	Medical Imaging
MLT	Medical Laboratory Technology
OCC	Pre-Occupational/Physical Therapy

BUSINESS

CODE TITLE

ACC	Accounting
BUS	Business Administration and Management
DPR	Data Processing and Computer Applications
FSM	Food Services
OST	Secretarial/Word Processing
RLE	Real Estate

COMMUNICATION ARTS

CODE TITLE

ART	Art
COM	Technical Communication
ENG	English/Journalism
FOR	Foreign Language
HUM	Humanities
LMT	Library/Media Technology
MUS	Music
PHI	Philosophy
SPE	Speech
THE	Theatre

CONTINUING & ADULT EDUCATION

CODE TITLE

ABE	English as a Second Language, Adult Basic and Secondary Education
GSS	Personal, Cultural and Career Development

ENGINEERING, MATHEMATICS, AND PHYSICAL SCIENCE

CODE TITLE

ABR	Auto Body Repair and Painting
ARC	Architectural Technology
AUT	Automotive Technology
BCT	Building Construction Technology
CAD	CAD-Drafting Technology
CIV	Civil Technology
EGR	Engineering
ELT	Electrical/Electronics Engineering Technology
FST	Fire Science Technology
GEO	Geology
MET	Mechanical Engineering Technology
MMR	Mechanical Maintenance/Repair
MTH	Mathematics/Computer Science
MTT	Machine Tool Trades/CNC
PHY	Physics
RAC	Refrigeration, Heating, and Air Conditioning
WLD	Welding
WWW	Water-Wastewater

PHYSICAL EDUCATION AND RECREATION

CODE TITLE

PAR	Parks and Recreation
PED	Physical Education

SOCIAL SCIENCE

CODE TITLE

ANT	Anthropology
CRJ	Criminal Justice
ECO	Economics
EDU	Education
GEG	Geography
HST	History
HUS	Human Services Program
PSC	Political Science
PSY	Psychology
SOC	Sociology

Application for Admission

If you need assistance completing this form, please call the Office of Admission and Records at (708) 223-6601, ext. 2573.

PLEASE TYPE OR PRINT LEGIBLY.
FILL IN OR CHECK APPROPRIATE RESPONSES.

1. SOCIAL SECURITY NUMBER:

2. COMPLETE LEGAL NAME:

(Last) (First) (Middle)

Former or Maiden Name: _____

3. PERMANENT 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) _____

4. 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) _____

5. TELEPHONE:

HOME: (_____) _____
Area Code Telephone Number

WORK: (_____) _____
Area Code Telephone Number

6. APPLYING FOR TERM BEGINNING: _____

YEAR

- 01 - Spring (January-May) 03 - Fall (August-December)
 02 - Summer (June-July)

7. 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 _____

8. DATE OF BIRTH:

_____/_____/_____
Month Day Year AGE: _____

9. SEX: M - Male F - Female

10. 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

11. 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

12. PROGRAM OF STUDY: Use list on the opposite page to find the educational plan you are most likely to follow:

CODE _____ TITLE _____

13. LAST HIGH SCHOOL ATTENDED:

Name _____ City _____ State _____

14. 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.

15. LAST COLLEGE/UNIVERSITY ATTENDED OR NOW ATTENDING - WRITE "NONE" IF YOU HAVE NEVER ATTENDED A COLLEGE/UNIVERSITY:

Name _____ City _____ State _____

16. HIGHEST EDUCATIONAL LEVEL COMPLETED AFTER HIGH SCHOOL:

- 01 - Certificate Program 05 - First Professional Degree
 02 - Associate Degree 06 - Doctoral Degree
 03 - Bachelor's Degree 07 - None of the above
 04 - Master's Degree

17. MILITARY SERVICE RECORD:

- 02 - Active Duty - Great Lakes 04 - Veteran
 05 - Never Served
 03 - Active Duty: STATION: _____

18. DO YOU HAVE A LEARNING OR MEDICAL DISABILITY WHICH MAY REQUIRE SPECIAL ASSISTANCE FROM THE COLLEGE (Optional):

- Y - YES N - NO

19. ETHNIC/RACIAL DESCRIPTION (Optional):

- 01 - Asian or Pacific Islander 04 - Black Non-Hispanic
 02 - Hispanic 05 - White Non-Hispanic
 03 - American Indian or Alaskan Native 06 - Non-resident Alien

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.)

Signature _____ Date _____

The College of Lake County affirms and adheres to a policy of equal opportunity in all aspects of education and employment.

OFFICE USE ONLY	TOWN CODE	COUNTY CODE	RESIDENCE CODE	H.S. CODE	COLLEGE CODE
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Residence Status

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	9. Mundelein
2. Antioch	10. North Chicago
3. Grant	11. Round Lake
4. Grayslake	12. Warren
5. Highland Park-Deerfield	13. Wauconda
6. Lake Forest	14. Waukegan
7. Lake Zurich	15. Zion-Benton
8. Libertyville	

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:

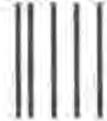
1. A person who is not a legal resident of the State of Illinois.
2. Includes International students and other non-immigrant aliens.

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.

(TEAR ALONG PERFORATION)

FOLD HERE FOR MAILING



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO. 62 GRAYSLAKE, IL

POSTAGE WILL BE PAID BY ADDRESSEE

**ATTN: Admissions
College of Lake County
19351 West Washington Street
Grayslake, Illinois 60030-9908**



COLLEGE OF LAKE COUNTY
19351 WEST WASHINGTON STREET
Grayslake, Illinois 60030-1198
(708) 223-6601

See back page for application.