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Shawnee College

SHAWNEE COLLEGE ROAD ULLIN, ILLINOIS 62992 618-634-2242

1981-83 CATALOG

SHAWNEE COLLEGE

Shawnee College Road Ullin, Illinois 62992

Phone (618) 634-2242

TWELFTH EDITION

Volume 12 — Number 1 January, 1981



President Klaus

MESSAGE FROM THE PRESIDENT . . .

I am delighted to welcome you to Shawnee College. You made a wise decision when you decided to join hundreds of other Southern Illinoisans in seeking a quality education at this institution.

Shawnee College staff is of the highest caliber. They are well trained in their respective teaching areas and they care about their students.

Shawnee College is concerned with each student as an individual. We want to help each of you succeed in your chosen field of study. The successful faculty member at Shawnee College has compassion for you as an individual. The faculty member wants you to succeed. The rest is up to you.

A MEMBER OF

American Association of Community and Junior Colleges
Council of North Central Community Colleges
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Illinois Community College Board
Illinois Board of Higher Education
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Hal C. Anderson Dean of Career Education



Suzanne Moorman Business Manager



Gene A. Cross Dean of Students



George A. Floyd Dean of Continuing Education

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OFFICIAL SHAWNEE COLLEGE **CALENDAR** 1981-83

FALL SEMESTER 1981

August 17 Freshman Orientation

August 19-20 Student Advisement & Registration

August 21 Instruction Begins

September 3 Registration Closes—Last Day to Drop

Classes Without Financial Penalty

September 7 Holiday—Labor Day October 12 Holiday—Columbus Day

October 20 Mid-Semester

November 6 Last Day to Drop or Apply for Audit

Without Academic Penalty

November 25-27 Thanksgiving Vacation

November 30 Classes Resume December 16-18 Final Exams December 18 **End of Semester**

SPRING SEMESTER 1982

January 4-5 Student Advisement & Registration

January 6 **Instruction Begins**

January 15 Holiday - Martin Luther King's

Birthday

January 20 Registration Closes—Last Day to Drop

Classes Without Financial Penalty

February 12 Holiday—Lincoln's Birthday

February 26 Mid-Semester March 1-5 Spring Vacation March 8 Classes Resume

March 19 Last Day to Drop or Apply for Audit

Without Academic Penalty

April 9 Holiday—Good Friday

May 12-14 Final Exams May 14 **End of Semester** May 16 Commencement

SUMMER SESSION 1982

June 2 **Student Advisement & Registration** June 3 **Instruction Begins** Registration Closes -- Last Day to Drop June 9 Classes Without Financial Penalty Mid-Semester July 1 July 2 Last Day to Drop or Apply for Audit Without Academic Penalty Final Exams July 29-30 July 30 **End of Summer Session**

FALL SEMESTER 1982

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Freshman Orientation August 16 Student Advisement & Registration August 18-19 August 20 **Instruction Begins** Registration Closes—Last Day to Drop September 2 Classes Without Financial Penalty Holiday—Labor Day September 6 October 11 Holiday—Columbus Day October 26 Mid-Semester Last Day to Drop or Apply for Audit November 12 Without Academic Penalty November 24-26 Thanksgiving Vacation November 29 Classes Resume December 15-17 **Final Exams** December 17 **End of Semester**

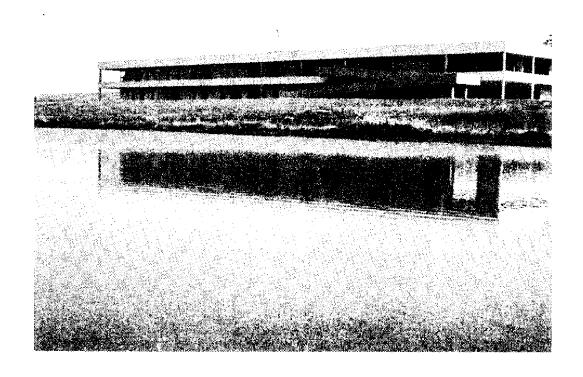
SPRING SEMESTER 1983

January 3-4 Student Advisement & Registration **Instruction Begins** January 5 Registration Closes—Last Day to Drop January 18 Classes Without Financial Penalty Mid-Semester March 4 Spring Vacation March 7-11 Classes Resume March 14 Last Day to Drop or Apply for Audit March 25 Without Academic Penalty Holiday—Good Friday April 1 Final Exams May 11-13

May 13	End of Semester
May 15	Commencement

SUMMER SESSION 1983

May 31	Student Advisement & Registration
June 1	Instruction Begins
June 7	Registration Closes—Last Day to Drop
	Classes Without Financial Penalty
July 1	Mid-Semester
July 4	Holiday—Independence Day
July 5	Last Day to Drop or Apply for Audit
	Without Academic Penalty
July 28-29	Final Exams
July 29	End of Summer Session



GENERAL INFORMATION

HISTORY AND ORGANIZATION

Shawnee College was organized as a Class 1 community college in September of 1967. Created to serve Southern Illinois and its people, the college district covers all of Union, Pulaski, Massac, Alexander and parts of Johnson and Jackson Counties.

The initial Board of Trustees was selected in December of 1967, and in May of 1968 Dr. Loren E. Klaus was named President. The college site consists of 163 acres in the scenic hills of Southern Illinois. Interim facilities were erected during the summer of 1969. Permanent campus buildings were completed in 1976. The college officially opened on September 24, 1969.

OBJECTIVES

The basic purpose of an educational institution is the preservation and advancement of civilization. Shawnee College attempts to develop in its students the ideas, attitudes, and spirit of inquiry which characterize the educated individual. The desired outcome of this educational process are stated broadly as follows:

For every student with whom it has significant contact, the college should challenge that student's prejudices, expand that student's awareness of the world and its people, enhance that student's social competence, strengthen sense of purpose in life, increase that student's appreciation of the arts, improve that student's learning capacity, and arouse curiosity so that the student will continue to learn, to think, and to stimulate others after the completion of formal education.

The objectives of Shawnee College are:

- (1) To provide two years of higher education in the arts and sciences leading to an associate degree.
- (2) To provide associate degree programs leading to employment in specific technologies.
- (3) To provide appropriate career programs leading to a certificate of completion.
- (4) To provide opportunities for intellectual growth in academic areas and for training in specific career skills and part-time enrollment in regular programs.

- (5) To initiate, support, and provide cultural and intellectual activities for all area citizens.
- (6) To provide an educational atmosphere through counseling, activities, and other services which will give students a reasonable opportunity for success in college.

CAMPUS

The campus of Shawnee College is located on the Shawnee College Road approximately seven miles east of Interstate Route 57. The site of 163 acres consists of gently rolling hills. The campus is one of the most attractive in the nation. The campus is centrally located within the college district.

STATUS OF ACCREDITATION

Shawnee College is fully accredited by the North Central Association of Colleges and Secondary Schools. Full accreditation implies the attainment of significant educational standards of quality and excellence which are recognized and respected among the institutions of higher learning.

EVENING COLLEGE

An evening college is operated for those students who are working full time during the day and would like to enroll for a part-time college program in the evening. The demand for evening classes determines the number of classes that will be offered at any one time. The college reserves the right to withdraw any college offering for which there is insufficient registration.

Over a period of years nearly all classes offered during the day will be offered at night. It will be possible to select course sequences which will lead to associate degrees in various curricula. In addition, Shawnee College expects to offer course work in continuing education programs for those area residents who desire to take advantage of such programs.



SUMMER SESSION

Summer sessions of varying lengths are scheduled each year. A student may earn up to twelve semester hours of credit during the summer session.

Summer semester courses are the same quality as those offered during the regular academic year. The selection of classes is based on the demand of prospective summer students. Persons interested in having certain courses offered should contact the college early in the spring to make their wishes known.

BOOKSTORE

A bookstore is operated by the college and carries all required textbooks and other instructional materials, equipment, and supplies. Bookstore items are selected to meet objectives of the course work.

STUDENT CENTER

A spacious and attractive center for student activities is provided on campus. Food and recreational facilities are available. In addition, many public groups are hosted in the student center.

LEARNING RESOURCES CENTER

Shawnee College has developed a comprehensive Learning Resources Center.

The LRC's collection of more than 34,000 books is increasing annually. The series collection includes 240 periodicals, 12 newspapers, and 13 indexing services. The collection of films, filmstrips, tapes and phonograph records is being expanded monthly. In addition, thousands of volumes of other books and materials are available to students through the college participation in joint agreements with other major library systems.

Library materials are charged out to a student upon presentation of his current I.D. card.

Students, faculty, and all members of the community college district are encouraged to visit the Learning Resources Center and utilize its fine resources and services.



STUDENT SERVICES AND ACTIVITES



COUNSELING

All entering students meet with professional personnel for counseling. Through the use of test results, high school records, and personal consultation, an effort is made to counsel the student concerning a program appropriate to that student's skills, aptitudes, and preparation. Other more specialized examinations may be given individual students upon their request or upon the advice of a counselor.

Each student is assigned a faculty advisor. An attempt is made to match the students' academic preferences with the background of their faculty advisors. It is hoped that students will avail themselves of the opportunity to counsel with their faculty advisors frequently.

The guidance program of the college involves a one semester hour course named Introduction to College Life. This course is mandatory for every entering freshman student carrying twelve or more semester hours credit. The one semester hour credit may be applied to any associate degree or certificate program at Shawnee College.

This course covers such topics as extra-curricular organizations and activities, use of the Learning Resources Center, requirements for graduation and transfer to senior institutions, general college regulations, testing, and other topics pertinent to the student's development.

CONDUCT

Shawnee College expects from its students the self-discipline necessary to acquire an education and will aid them in developing such a skill. Students who earnestly attempt to assume the responsibilities of college membership will receive the fullest measure of guidance and encouragement. Those found guilty of serious misconduct are subject to suspension and/or expulsion from the college. Cheating constitutes grounds for dismissal from the course with a grade of F assigned thereto.

STUDENT ACTIVITIES

The college offers a comprehensive program of student activities including fashion shows, the college yearbook, student newspaper, dances, plays, madrigal, and other social and cultural activities. In addition, a comprehensive athletic program is offered for both men and women including basketball, baseball, golf, softball and volleyball.

STUDENT SENATE

The Student Senate is chiefly responsible for the development and guidance of student activities. It is a group of seven elected and two appointed students assisted by a faculty advisor. Its functions are to express student opinion, coordinate the activities of student groups, assist in planning and carrying out selected college social events, present a cultural series, and promote the welfare of the student body.

All official student activities must be pre-approved by the Dean of Students.

TESTING

Shawnee College provides a comprehensive testing program for the college community. It serves the needs of its population through its own testing program as well as cooperative contractual services with federal, state, and private agencies. Shawnee College has become a national testing center for several major testing agencies.



AMERICAN COLLEGE TEST (ACT)

The American College Test (ACT) is an assessment program which provides students and counselors information necessary for sound educational planning. These tests are administered on five national testing dates and are open to high school juniors and seniors as well as college students. Applications may be secured from the local high school counselor or the Director of Guidance and Counseling at Shawnee College.

GENERAL EDUCATIONAL DEVELOPMENT (GED)

There are many educationally mature persons who, for some reason or other, did not complete their formal high school training. The General Education Development test provides an opportunity for these adults to secure an evaluation of their educational maturity and competence and receive a high school equivalency certificate. These tests are administered three times each year and are available to adults in the college district. Applications may be secured from the local Superintendent of the Educational Services Region.

COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

Shawnee College believes college-level achievement should be recognized and rewarded whether or not gained from formal school attendance. The College-Level Examination Program (CLEP) offers the means by which college and universities can realize this objective. In essence, enrollment in certain college courses may be waived if the student demonstrates mastery of course content by achieving a certain score on the CLEP test. Applications for CLEP testing may be secured from the office of the Director of Guidance and Counseling at Shawnee College.

VOCATIONAL CREDIT BY PROFICIENCY EXAMINATION

If reasonable evidence exists that a student possesses proficiency in a particular subject area, the student may petition to take a proficiency examination. The petition must be approved by the appropriate dean.

Students desiring to take proficiency examinations must first contact the appropriate divisional chairman at the beginning of a semester to make arrangements to complete the tests. Test fees are the same as tuition fees and are payable to the business office prior to taking the proficiency test.

If a student's achievement on the examination meets the standard set by the college, credit for the course will be entered on the student's permanent record upon certification by the appropriate dean. A student will not be certified in any course for which he is not eligible to register for credit.

ENTRANCE TESTS

Various tests are administered to incoming students to assess their level of competencies in various areas or to determine their acceptance in particular curricula.

Individual tests may be administered to assist students to recognize their individual strengths and weaknesses and as an aid in choosing a relevant career.

Information concerning these tests may be secured from the Office of the Director of Guidance and Counseling at Shawnee College.

FINANCIAL AIDS

The goal of the College in promoting a Financial Aids Program is the removal of economic barriers to higher education among the able people of all classes of our society. To accomplish this objective, Shawnee College has developed a variety of financial aids to assist students in overcoming economic problems associated with college attendance.

LOCAL PROGRAMS

Presidential Scholarship. Two qualifying graduating seniors from each *high school located* in the *Shawnee College district* may be selected as presidential scholars at Shawnee College each year. THE COLLEGE WAIVES ALL TUITION, REQUIRED TEXTBOOK AND FEE CHARGES.

Qualifications of a presidential scholar:

- 1. A presidential scholar must rank in the *top ten percent* of his/her high school *graduating class* as certified in writing to the college by the high school principal. *Presidential scholars* are the top two of that group who make proper application for the scholarship, enroll at Shawnee College, and are approved by the college.
- 2. A presidential scholar must *file a completed application* for the scholarship with the Director of Financial Aid at Shawnee College by *March 15*.
- 3. A presidential scholar must complete the ACT test with a score satisfactory to the college. And, complete any special examinations required with a satisfactory score required for his/her particular curriculum. All such scores must be filed with the college's Director of Financial Aid by March 15 before the application is complete.
- 4. To be considered, completed applications and supporting materials must be on file in the college's Director of Financial Aid office by *March 15*.

Other:

1. Presidential scholars must enroll in an Associate of Arts, Associate of Science or Associate of Applied Science Program.

- 2. Presidential scholars must enroll in at least 15 semester hours each semester (except summer) and maintain a 3.5 (B +) grade point average to qualify as a continuing presidential scholar.
- 3. The presidential scholarship program must be completed within 24 months from the date of that student's high school graduation.
- 4. Presidential scholars must remain in good standing in terms of conduct and citizenship as determined by the college.
- 5. To continue as a presidential scholar, the student must pay on schedule debts of any kind or character owed the college.
- 6. The college reserves the right to alter or cancel individual scholarships at any time.

Shawnee College Scholarships and Memorial Loan Fund. For those students who have not been able to avail themselves of other scholarships, grants or loans, a memorial or short-term loan fund has been established at Shawnee College. For information concerning these funds, contact the Office of Financial Aid at Shawnee College.

Miscellaneous Assistance. Shawnee College has some local scholarships, short-term loans and grants available.

STATE PROGRAMS

Illinois Guaranteed Loan. This loan enables a student who is an Illinois resident to borrow up to \$2,500 each year to pay educational expenses. Normally students who receive an IGL are not eligible for an NDSL during the same period.

Some students who receive the IGL may qualify for federal interest benefits. Repayment may also be deferred for up to three years while the borrower is a member of the Armed Forces.

Illinois State Scholarship Monetary Grant. Monetary awards are conferred by the Illinois State Scholarship Commission in annual amounts to students on the basis of financial need. The applicant must be a legal resident of the State of Illinois, as determined by the legal residence of the parent or guardian. Applications are available from the Shawnee College Financial Aid Office and are to be returned to the Illinois State Scholarship Commission. This grant pays tuition and mandatory fees.

Vocational Rehabilitation Grants. The State of Illinois Division of Vocational Rehabilitation may provide funds for board, room, transportation, and other necessary expenses for a person who is found to be

disabled. The applicant must have a disability which prevents his getting a suitable job, or threatens his continued employment. The applicant must have a "reasonable" chance of being able to work in suitable employment after training is provided. Students who have a medical or physical disability should contact an office of Vocational Rehabilitation or the office of the Dean of Students for further information.

FEDERAL PROGRAMS

Shawnee College subscribes to the principle that the amount of financial aid granted a student be based on financial need. Therefore, the ACT Family Financial Statement is required of all students securing federal funds through the college. Inquiries concerning financial aid should be made to:

Director of Financial Aids Shawnee College Ullin, Illinois 62992 (618) 634-2242

National Direct Student Loan. The NDSL program is available to students who can demonstrate a financial need by the ACT Family Financial Statement. The money borrowed accrues no interest as long as the student remains in school. When repayment period begins, the annual interest rate is three percent on the unpaid balance.

Supplementary Educational Opportunity Grant. The basic purpose of the SEOG is to assist students with exceptional financial need. The student does not repay the grant. The grant will provide these students a sum of federal money which must be matched with an equal amount of financial aid through the National Direct Student Loan or College Work-Study program.

The Basic Educational Opportunity Grant. The amount of financial aid a student may receive is based on a formula which takes into account the amount the student and his family or spouse can be expected to contribute to his education. This grant does not have to be repaid or matched.

College Work-Study Program. Shawnee College provides job opportunities on the campus or through public and private non-profit agencies for students to earn money with which to finance their education. College work-study students are paid a salary equivalent to the minimum wage.

VETERAN'S BENEFITS (G.I. BILL)

Shawnee College has been approved by the State of Illinois Veteran's Approval Agency for Veteran's Education.

This Federal program administered by the Veteran Administration allows up to 45 months of higher education and up to \$311 per month full time single veteran students with half time and three-fourths time at lesser amounts. For married students it allows \$370 per month plus a proportionate increase for each additional dependent.

The Veteran Administration does not furnish books and a student veteran must maintain satisfactory progress to continue.

Students who have served 180 days or more in the military after May 31, 1966 and prior to December 31, 1976 or after December 31, 1976 if they signed for the new G.I. Bill should contact the Illinois Department of Veteran Affairs or Veteran's representative on campus to confirm the possibility of benefits and the G.I. Bill.

To be eligible each student must submit the original or a copy certified as true or their DD214 separation paper and fill out the appropriate application for education and training. For further information and assistance contact the Shawnee College Veteran Coordinator.

WAR ORPHANS ASSISTANCE PROGRAM

The War Orphans Educational Assistance Act (Chap. 35, Title 38, U.S.C.) was amended to provide benefits available not only to sons and daughters of deceased veterans but also to sons and daughters of living veterans who have disabilities which are considered to be total and permanent in nature.

Generally, a young person (man or woman) must be between 18 and 26 years of age to attend school under the program. In certain instances, it is possible to begin school before age 18 and continue after age 26. Marriage is not a deterrent to this benefit.

SATISFACTORY ACADEMIC PROGRESS

All students who receive financial aid to attend Shawnee College must make "satisfactory academic progress" or have the financial aid withdrawn until "satisfactory academic progress" is achieved. "Satisfactory academic progress" is defined as making a 2.0 grade point average for the semester. A student must be enrolled in at least 6 semester hours of credit in order to qualify for financial aid.

ADMISSIONS

Shawnee College will admit students qualified to complete any of its programs if space for effective instruction is available. General Education, Transfer and Occupational programs are offered. Preference in admissions will be given to students whose legal residence is within the Shawnee College district.

The requirements for admission include the filing of the following forms and numbers with the Dean of Students:

- Application for admission
- Transcript from high school or GED scores
- ACT scores
- Social Security number
- Other materials required for certain programs

ACT SCORES

Each applicant should have an official copy of his American College Test (ACT) scores on file with the Director of Guidance. Shawnee College is a national testing center for ACT and students may take their tests on campus on the designated testing dates. Otherwise, test scores are to be requested from the American College Test Service, Box 168, Iowa City, Iowa 52240. If scores from the American College Test Service are requested, the Shawnee College identification number, 1173, should be given.

1980-81 ACT NATIONAL TEST DATE SCHEDULE

October 18, 1980 December 13, 1980 February 14, 1981 March 28, 1981 June 13, 1981

STUDENT REGISTRATION

Applicants accepted for admission will be asked to report to the college during the summer for testing and academic counseling. At that time they will be given guidance in planning their programs of study and



arranging their class schedules. Final registration will take place during orientation week. Ordinarily no student will be admitted to a curriculum before he has been tested. Counseling and pre-registration for the fall and spring semesters and the summer session will take place during the final weeks of the previous semester.

RESIDENCE

Should the number of admission requests exceed the space available, students living within the Shawnee College district will be given first preference. Students living outside the district will be accepted in a manner determined by the college. If space is not available for all resident students applying, the college will accept those best qualified using rank in class, ability and achievement tests, and other evidence as required by the college.

TUITION AND FEES

Illinois law provides that tuition charged may not exceed 1/3 the per capita cost of operation. The community college district is also authorized to charge out-of-state students the full per capita costs.

The Board of Trustees may adjust tuition rates listed in this catalog as necessary.

SHAWNEE COLLEGE

Resident Tuition (Residents of Shawnee College District 531)

Students who do not officially withdraw from Shawnee College by the tenth day of instruction are required to pay all tuition and fees incurred during the registration.

Per Semester Hour\$10.00 Special lab fees may be charged for selected courses.

Official tuition and fees refund policy:

A refund of tuition and fees will be given up to the 10th day of instruction. Refund on the cost of books will be determined on an individual basis primarily depending upon the condition of the book.

Charge-Back Tuition (Residents of Illinois Outside Shawnee College District)

A student who resides in an Illinois high school district, not located within a community college district, may have partial costs paid by his high school district if he notifies that district at the time provided by law that he plans to attend a community college the following year.

A student who resides in a community college district which has not begun operation may have partial costs paid by his community college district if he notifies that district of his intent to attend a community college the following year.

A student who resides in an Illinois community college district with an operational community college may have partial costs paid by that student's college district if that student enrolls in a program which the local community college does not offer. In all other cases students from these districts must pay their own costs.

Non-Resident Special Charges

Non-resident out-of-state students will pay special charges determined by per capita costs.

Other Fees (Non-Refundable)

Graduation fee	10.00
Laboratory fee (per semester hour)	75

CHANGE OF SCHEDULE

Any change of schedule after registration has been completed shall be processed through the Office of the Director of Guidance and Counseling.

WITHDRAWAL FROM THE COLLEGE

To officially withdraw from Shawnee College, a student must make proper application at the Office of the Director of Guidance and Counseling. An orderly withdrawal procedure assures the student that there would be no procedural problems which would prevent his entering another institution or re-entering Shawnee College. TUITION AND FEES FOR CLASSES FOR WHICH STUDENTS HAVE NOT OFFICIALLY WITHDRAWN BY THE TENTH DAY OF INSTRUCTION ARE DUE AND PAYABLE.



ACADEMIC REGULATIONS

GRADING SYSTEM

The progress of students at the college is indicated by the grades received in each course of study. The following system is used:

GRADE	GRADE POINTS
A — Excellent	4
B -Good	3
C — Average	2
D — Passing	
F — Failing	0
1 —Incomplete	0
W — Withdrawal	0

A grade of W will be given for any withdrawal within a designated period of each semester. After this designated period a grade of F will be given for withdrawal in all classes except in cases where extenuating circumstances prevail. In such cases and upon the recommendation of the appropriate dean, a W may be given to the student.

If a student has a legitimate reason approved by the appropriate dean for not finishing course work during the current semester, that student may receive an "Incomplete" on the transcript. The work, however, must be completed the following semester or the "Incomplete" becomes a grade of "F". This does not include the summer session.

The grade point average (G.P.A.) is computed by multiplying the grade points earned in a course by the number of credit hours for the course, adding these products for each course, and dividing by the total number of credit hours. The grade points with an F will be computed in the G.P.A. unless the course is later repeated with a satisfactory grade. Neither credit hours nor grade points will be computed in those courses where a grade of I or W is assigned. A student's standing in a curriculum is determined by his cumulative G.P.A.

A student who does unsatisfactory work will be given academic warning for that semester. If work is unsatisfactory for the following semester, the student will be placed on probation. At this point the student may choose to change curriculum or continue the current program, but in either case the student must improve his/her standing satisfactorily or be dropped from college for one academic semester. A student may attend a summer session to raise the G.P.A. to a satisfactory level. The minimum satisfactory average is 2.0.

ATTENDANCE

All students shall be required to attend classes on a regular basis. Excessive absences may lead to a student being denied the right to take the final examination and consequently to a grade of F in the course.

If extenuating circumstances make it necessary for the student to drop a class or withdraw from school, he/she must withdraw formally through the Office of the Director of Counseling.

SCHOLASTIC RECORDS AND STANDARDS

Class records of students are kept by each instructor and are available to the student upon request. A personal grade report is mailed each student at the completion of each term.

Complete permanent records are maintained by the registrar and official transcripts are available upon request, providing the student owes the college no debts and has no default student loans. Each student is entitled to three free transcripts.

TRANSFER OF CREDITS

Colleges and universities reserve the right to reject, in certain cases, credits for courses in which the grade of D was received. Also, they can accept or reject a student for admission based upon the student's prior academic accomplishment.

If the student should change his curriculum in the process of transferring from Shawnee College to another college or university, credits for certain courses may not be applicable toward requirements in the new curriculum.

If a student continues the same transfer curriculum started at Shawnee College and has maintained a grade of C or better for all courses taken, it is anticipated that all credits will be accepted in transfer. While there may be a question of applicability of particular courses for bachelor degree requirements, it is the responsibility of the student to check with his academic advisor or the Director of Guidance and Counseling.

CLASSIFICATION OF STUDENTS

Students with fewer than 30 semester hours of acceptable credit are classified as freshmen; those with 30 or more semester hours of acceptable credit are classified as sophomores.

STUDENT ACADEMIC LOAD

It is assumed that the usual academic load for full-time students in this institution will be 12-16 semester hours of credit. The total credit hours for any student cannot exceed 18 in any one term nor 12 in any one summer session without written permission from the appropriate Dean.

PRESIDENT'S HONOR LIST

At the completion of each semester, the college will publish a President's Honor List of academic achievement. Any full-time student who has a 4.0 grade point average for that semester will receive this honor.

DEANS' LIST

At the completion of each semester, the college will publish a Deans' Honor List of academic achievement. Any full-time student who has a 3.20 grade point average for that semester will be placed on this list.

GRADUATION WITH HONORS

If a student has completed associate degree requirements with a cumulative index of 3.50 or higher, the degree shall be awarded with honors.

CREDIT IN ESCROW

Early college admission may be granted in advance of high school graduation if the student is sixteen years of age or older. This credit is contingent on the successful completion of the high school course of study. In no event shall these credits be counted toward high school graduation. Permission for such enrollment must be in writing from the high school superintendent. All courses for escrow students must be completed within the current semester and no grade of INC. granted.

PROGRAMS OF STUDY

Several programs of study are available at Shawnee College leading to the degrees of Associate of Arts, Associate of Science, Associate of Applied Science, and Associate of General Studies; other programs have one or more of the following purposes:

- 1. For preparation to enter an occupation.
- 2. For general education and cultural development.
- 3. General studies for development and preparatory work.

A student planning to transfer to a four year college or university can complete the requirements of the first two years of college work at Shawnee College and after two years of further study in the institution to which the student transfers graduate with a baccalaureate degree. The student should make a decision regarding transfer plans and consult with a counselor to arrange a program of courses which will satisfy the requirements of the institution of his choice.

REQUIREMENTS FOR GRADUATION

The specific requirements for graduation with an Associate Degree (other than Associate of General Studies) are:

- 1. Successful completion of at least 64 semester hours of college credit, at least 30 semester hours of which must be earned at Shawnee College.
- 2. Enrollment at Shawnee College for the last semester preceding graduation.
- 3. Satisfactory performance and completion of course requirements for the curriculum chosen by the student as outlined.
- 4. A satisfactory grade on the examination covering the constitutions of the State of Illinois and of the United States as required by Illinois law (the examination is given in American Government 117 which is a required course for all degree candidates).
- A cumulative grade point average for all work taken at Shawnee College of 2.00 (C) or higher.
- 6. Successful completion of the course, Introduction to College Life, a one semester hour course designed to orient the student to the educational opportunities and facilities of the college.

A candidate for an Associate of Arts Degree from Shawnee College must meet the following requirements:

- 1. Successful completion of eight semester hours of college credit in each of the four basic divisions:
 - a. Language Communications
 - Includes 6 required semester hours of English Composition 111, 112.
 - 2) Excludes foreign language
 - b. Science and Mathematics
 - c. Social Science
 - 1) Includes 3 required semester hours of American Government 117.
 - d. Humanities
- Successful completion of eight semester hours of college credit in a sequence of foreign language. A student who has two or more years of high school foreign language may enroll in the second year of foreign language if that student obtains permission from the appropriate dean.

A candidate for an Associate of Science degree from Shawnee College must meet the following requirements:

- 1. Successful completion of eight semester hours of college credit in each of the three basic divisions:
 - a. Language Communications
 - 1) Includes 6 required semester hours of English Composition 111, 112.
 - 2) Excludes foreign language.
 - b. Humanities
 - c. Social Science
 - 1) Includes 3 required semester hours of American Government 117,
- Successful completion of a minimum of 16 semester hours of college credit in the areas of Science and/or Mathematics.

In the above Associate Degree programs, Literature courses may apply to either the Humanities or Language Communications divisions, but may not apply to both. Western Civilization courses may apply to either Humanities or Social Science divisions, but not to both.

GENERAL STUDIES PROGRAM

This program is designed to give the student an opportunity to develop the student's abilities, to remove deficiencies, and to qualify for the curriculum of the student's choice. The program is designed and supervised by the student's faculty advisor within guidelines established by the college. This general studies program is not the same as a general studies or general education program at a four-year institution.

GRADUATION REQUIREMENTS

Specific requirements for graduation with the Associate of General Studies Degree are:

- Successful completion of at least 64 semester hours of college credit with at least 30 of the above 64 hours earned at Shawnee College.
- 2. A cumulative grade point average of 2.00 (C) for all courses presented for graduation.
- 3. Enrolled at Shawnee College during the semester immediately prior to graduation.
- 4. Includes 3 required semester hours of American Government 117.

CONTINUING EDUCATION

The continuing education program at Shawnee College is considered as an extension of programs rather than a separate division of the college. However, some courses are available under the general studies division which are not included in any other college program.

A program for general educational development (G.E.D.) is available in the general studies division which serves to prepare adults to successfully complete requirements for the high school equivalency (G.E.D.) test. This test is administered at Shawnee College. For further information, students should contact the Director of Guidance and Counseling.



APPLIED BIOLOGICAL AND AGRICULTURAL OCCUPATIONS

AGRI-BUSINESS

This program leads to an Associate of Applied Science degree and prepares the student to provide the farmer with goods and services. The types of jobs include salesmen in feeds, seeds, fertilizers, machinery, warehouse managers and employers, and self-employed dealers in agricultural supplies.

FIRST SEMESTER English 104 or 111 Intro. to College Life 101 Accounting 111 Business Organization 119 Ag. Economics 126 Total F	3 1 4 3	SECOND SEMESTER English 105 or 112 Prod., Sales & Service 131. Business English 117 Business Finance 220 Government 117 Lotal F	
SUMMER SESSION Agri-Business Internship 245 SOPHOMORE YEAR			
FIRST SEMESTER Speech 111	333 ural3	SECOND SEMESTER Ag. Mgmt. & Inv. Cont. 233 Crop, Lawn and Garden Sales & Service 232 Principles of Sales 228 Practical Psychology 214	3 3 3 2

AGRICULTURAL RESOURCES

A two-year curriculum leading to an Associate of Applied Science degree and preparing the student for a variety of jobs concerned with conservation and effective use of agricultural resources.

Proper selection of electives will allow the student to emphasize conservation, forestry, or outdoor recreation and park management within the total agricultural resources program.

FRESHMAN YEAR

HRST SLMESTER Sem. Hrs. English 104 or 111 3 intro. to College Life 101 1 Business Math 115 3 Soil Science 123 3 Conservation of Natural Resources 127 3 Health 111 2 Total Hours 15	SECOND SEMESTER Sem. Hrs. English 105 or 112
SUMMER SESSION Sem. Hrs. Agricultural Resources Internship 240 4	
SOPHOMORE YEAR	
IIRST SEMESTER Sem. Hrs. Introduction to Lorestry 225 3 Introduction to Wildlife 227 3 Application & Use of Agriculture Chemicals 230 3 Crop Science 132 3 Flective 3	SECOND SEMISTER Sem. Hrs. Plant Propagation 231
- ructive	Total Hours 15

RECOMMENDED ELECTIVES

Total Hours

Biology 111 Botany 213 Speech 111 Forest Management 226 Wildlife Management 228



ANIMAL AND CROP SCIENCE

A two-year curriculum leading to an Associate of Applied Science degree designed to improve in depth the student's ability and knowledge to manage a farm producing livestock and/or crops.

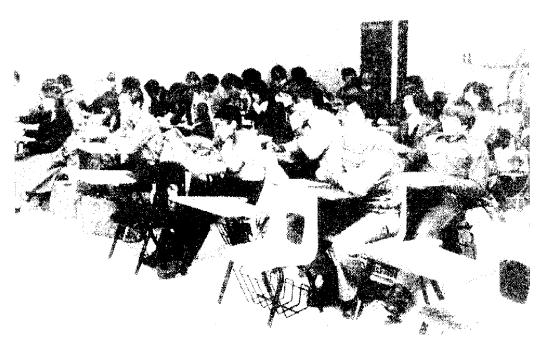
FRESHMAN YEAR

FIRST SEMESTER Sem. Hrs. English 104 or T11 3 Intro. to College Life 101 1 Business Math 115 3 Soil Science 123 3 Ag. Economics 126 3 Health 111 2 Total Flours 15	SECOND SEMESTER English 105 or 112 Soil Science 124 Am. Government 117 Prac. Psychology 214 Animal Science 223 Toi	
SUMMER SESSION Sem. Hrs. Animal and Crop Science Internship 247		
SOPHOMORE YEAR		
HRST SEMESTER Sem. Hrs. Application and Use of Agricultural Chemicals 230 3 Crop Science 132 3 Ag. Management 130 3 Ag. Mechanics 224 3 Hective 3	SECOND SEMESTER Plant Propagation 231 Grain Production 222 Animal Nutrition 122 Surveying 129 Llective	

RECOMMENDED ELECTIVES

Total Hours 15

Livestock Selection and Evaluation 249 Conservation of Natural Resources 127



GREENHOUSE MANAGEMENT

This program should provide the student with the necessary knowledge and skills for employment in the area of greenhouse management. A certificate will be awarded upon successful completion of the program.

FIRST SEMESTER	Sem. Hrs.		iem. Hrs.
Introduction to Greenhouse		Landscape Design 113	3
Operation 112	3	Greenhouse Management 130	3
Soil Science 123,	3	Horticulture Business	
Botany 213	4	Management 131	3
Introduction to Horticulture 1	11 5	Internship 132	5
Insect Pest & Plant Disease 12	8 3	Total Hou	
	al Hours 18		



HORTICULTURE—NURSERY MANAGEMENT

This program should provide the student with the necessary knowledge and skills for employment in such areas as horticulture-nursery operations. A certificate will be awarded upon successful completion of the program.

FIRST SEMESTER	Sem. Hrs.	SECOND SEMESTER	Sem. Hrs.
Introduction to Greenhouse		Landscape Design 113	3
Operation 112	3	Nursery Operations 127	4
Soil Science 123	3	Horticultural Business	
Botany 213	4	Management 131,	3
Introduction to Horticulture 1	11 5	Internship 132	5
Insect Pest & Plant Disease 12	8 3	Total	al Hours 15
Tota	d Hours 18		

HORTICULTURAL TECHNOLOGY

This program should provide the student with the necessary knowledge and skills in the general area of horticulture such as golf course greens keeper, floriculture, nursery operator and landscape planner. A certificate will be awarded upon successful completion of the program.

FIRST SEMESTER	Sem. Hrs.	SECOND SEMESTER	Sem. Hrs.
Introduction to Greenhouse		Landscape Design 113	3
Operation 112	3	Turfgrass Culture 125	4
Soil Science 123	3	Nursery Operations 127	4
Botany 213	4	Greenhouse Management 13	30 3
Introduction to Horticulture	111 5	Horticultural Business	
Insect Pest & Plant Disease 1	128 3	Management 131	3
To	otal Hours 18	То	tal Hours 17
SUMMER SESSION	Sem. Hrs.		
Internship 132	5		

ASSOCIATE OF APPLIED SCIENCE DEGREE

The above certificate program may be extended into an Associate of Applied Science degree upon successful completion of an additional thirty two semester hours consisting of at least six semester hours in each of the following areas: Communications, Mathematics and Science, Social Studies (Must include American Government 117), and Humanities.

TURFGRASS MANAGEMENT

This program should provide the student with the necessary knowledge and skills for employment in such areas as golf course greens keeping. A certificate will be awarded upon successful completion of the program.

FIRST SEMESTER	Sem. Hrs.	SECOND SEMESTER	Sem. Hrs.
Introduction to Greenhouse		Botany 213	
Operation 112	3	Turfgrass Culture 125	
Soil Science 123			
Landscape Design 113	3	Management 131,	
Introduction to Horticulture 1		Internship 132	5
Insect Pest & Plant Disease 12	8 3		otal Hours 16
lot	al-Hours 17		

WASTEWATER TREATMENT TECHNOLOGY

This program will provide the student with the required knowledge and skills appropriate for employment in the area of wastewater technology. It will prepare the student for employment in sewage treatment plants or other related areas of wastewater technology. A certificate will be awarded upon successful completion of the program.

HRST SEMESTER	Sem. Hrs.
Introduction to Water/Wastewater	r
Fechnology 110	2
Basic Wastewater Treatment 111.	3
Advanced Wastewater Treatment:	
Laboratory Analysis of Wastewater	r 116 3
Water/Wastewater Treatment Inte	rnship
133	5
Total Ho	ours 16



WATER TREATMENT TECHNOLOGY

This program will provide the student with the required knowledge and skills appropriate for employment in the area of water treatment technology. It will prepare the student for employment in water plants and other related areas of water treatment technology. A certificate will be awarded upon successful completion of the program.

FIRST SEMESTER	Sem.	Hrs
Introduction to Water/Wastewater	•	
Technology 110		2
Basic Water Treatment 112		
Advanced Water Treatment 114		
Laboratory Analysis of Water 115		3
Water/Wastewater Treatment Inte	rnship)
133		
Total Ho		

WATER/WASTEWATER TECHNOLOGY

This program will provide the student with the required knowledge and skills appropriate for employment in the area of water/wastewater technology. It will prepare the student for employment in water plants, sanitation plants or other related areas in water and/or wastewater technology. A certificate will be awarded upon successful completion of the program.

FIRST SEMESTER Sem. Hrs.
Introduction to Water/Wastewater
Technology 110
Basic Wastewater Treatment 1113
Basic Water Treatment 1123
Advanced Wastewater Treatment 1133
Advanced Water Treatment 1143
Laboratory Analysis of Water 115 3
Laboratory Analysis of Wastewater 116 3
Water/Wastewater Treatment
Technology Internship 1335
Total Hours 25



WILDLIFE TECHNOLOGY

A two-year curriculum designed to prepare the student for employment in a variety of jobs related to wildlife management and conservation. The Associate of Applied Science degree will be awarded to the student upon successful completion of this program.

. Hrs. SECOND SEMESTER 3 English 105 or 112 1 Soil Science 124 3 Am. Government 117 3 Animal Science 223 3 Conservation of Water Res. 128 2 Total	
. Hrs. 4	
Hrs. SECOND SEMESTER 3 Wildlife Mgmt. 228	



BUSINESS, MARKETING AND MANAGEMENT OCCUPATIONS

ACCOUNTING

This is a two-year curriculum leading to an Associate of Applied Science degree in accounting and is designed to provide the student with entry level skills as a junior accountant. The student should have a basic knowledge of accounting as it pertains to sales and purchases, commissions, piecework, payrolls, discounts, insurance, and tax computations.

FIRST SEMESTER Sem. Hrs. Accounting 111 4 English 104 or 111 3 Business Law 214 3 Business Machines 125 3 Business Organization 119 3 Intro. to College Life 101 1 Total Hours 17	Accounting 112
SOPHOMORE YEAR	
FIRST SEMESTER Sem. Hrs. Accounting 211	SECOND SEMESTER Sem. Hrs. Accounting 212

CLERK-TYPIST

The purpose of this program is to provide students with an intensive training plan of relatively brief duration, which equips them with the skills necessary for gainful employment in the general clerical area of business and industry.

FIRST SEMESTER	Sem. Hrs.	SECOND SEMESTER	Sem. Hrs.
English 104 or 111	3	Intermediate Typewriting 122	3
Typewriting 121	3	Secretarial Procedures 226	4
Business Math 115	3	Business English 117	3
Records Management 120 .	3	Business Internship 230	4
Business Machines 125	<i></i> 3	Machine Transcription 128	
Intro. to College Life 101	1	Total	Hours 16
To	tal Hours 16		

EXECUTIVE SECRETARY

A two-year curriculum designed to prepare the student for employment as a secretary capable of taking dictation, transcribing, typing, handling appointments, screening office visitors, reading and writing routine office correspondence. The Associate of Applied Science degree will be awarded upon successful completion of the curriculum.

FIRST SEMESTER Shorthand 123	3 3 3	SECOND SEMESTER Shorthand & Transcription 124 Intermediate Typewriting 122 Government 117 English 105 or 112 Business Math 115 Machine Transcription 128 Tota	4
SOPHOMORE YEAR			
FIRST SEMESTER Business Law 214	3 3 3	SECOND SEMESTER Secretarial Procedures 226	

CERTIFIED PROFESSIONAL SECRETARY PROGRAM

The Certified Professional Secretary curriculum is designed to prepare individuals to pass the Certified Professional Secretary examination. The Certified Professional Secretary must demonstrate proficiency in areas of environmental relationships in business (human relationships); business and public policy (business law); economics of management; financial analysis and the mathematics of business; communications and decision making; and office procedures, including the fundamentals of business data processing.

Upon the successful completion of this curriculum, students will be awarded a certificate of completion.

FIRST SEMESTER Office Procedures and Administration 230	 Economics and Management 23: Financial Analysis and Math 234 Communications and Decision Making 235 Shorthand & Transcription 124.	
ships in Business 232 Intermediate Typewriting 122		

LEGAL SECRETARY

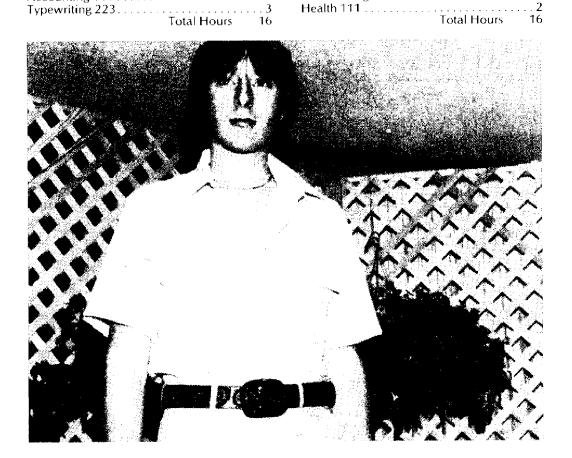
A two-year curriculum designed to prepare a student for employment as a legal secretary capable of meeting the demands of the busy legal profession. The lawyer depends on the typing of legal documents, dictation and transcription, research, telephone and reception service, filing, records management, and legal secretarial administration that can only be performed by a well-trained legal secretary. The Associate of Applied Science degree will be awarded upon successful completion of the curriculum.

FIRST SEMESTER Business Law 214. English 104 or 111. Shorthand 123. Beginning Typewriting 121. Intro. to College Life 101 Business Math 115. Total Hou	3 3 3 1	SECOND SEMESTER Business Law 215 English 105 or 112 Shorthand & Transcription 12- Intermediate Typewriting 122 Government 117 Practical Psychology 214 Tota	
SOPHOMORE YEAR			
FIRST SEMESTER Business English 117 Shorthand & Trans. 224 Records Management 120 Accounting 111 Typewriting 223 Total Hou	3 4	SECOND SEMESTER Health 111	

MEDICAL SECRETARY

A two-year curriculum designed to prepare the student for employment as a medical secretary capable of taking and transcribing medical dictation, writing reports, and maintaining patient files. The Associate of Applied Science degree will be awarded upon successful completion of the curriculum.

HRST SEMESTER Sem. Hrs. Business Machines. 3 English 104 or 111 3 Shorthand 123 3 Practical Psychology 214 3 Beginning Typewriting 121 3 Intro. to College Life 101 1 Total Hours 16		SECOND SEMESTERSem. Hrs.English 105 or 112	
SOPHOMORE YEAR			
FIRST SEMESTER Medical Terminology 228 Shorthand & Trans. 224 Records Management 120 Accounting 111	3 3 	SECOND SEMESTER Shorthand & Trans. 225 Secretarial Procedures 226. Business Internship 230 Business English 117	



MID MANAGEMENT

This curriculum is designed to prepare the student for employment as a liaison between employees and top level management in the business world. The Associate of Applied Science degree in Mid Management will be awarded upon successful completion of the curriculum.

FIRST SEMESTER Sem. Hrs. English 104 or 111 3 Business Organization 119 3 Principles of Marketing 126 3 Government 117 3 Intro. to College Life 101 1 Business Machines 125 3 Total Hours 16	SECOND SEMESTER Sem. Hrs. English 105 or 112
SOPHOMORE YEAR	
FIRST SEMESTER Sem. Hrs. Accounting 111	SECOND SEMESTER Sem. Hrs. Accounting 112 4 Business Finance & Cr. 220 3 Business Law 215 3 Business Internship 230 4 Elective 3 Total Hours 17

HEALTH OCCUPATIONS

NURSE ASSISTANT TRAINING PROGRAM

The aim of the Nurse Assistant Program at Shawnee College is to teach and train the nurse assistant to function effectively in basic nursing skills and as an integral part of the health team under the direction of a registered nurse or licensed practical nurse in a nursing home or in home health care.

Upon successful completion of this course, the student will be awarded a certificate.

Nurse Assistant 100 6 semester hours

PRACTICAL NURSING

This curriculum is designed to prepare students for entry into the nursing profession upon completion of one year of training. The student should develop a relatively high degree of expertise in the following:

- (1) Nursing the patient whose health has been affected by the aging process.
- (2) Total nursing care for the adult whose nursing needs are relatively stable.
- (3) Caring for the adult whose health has been impaired by nutritional deficiencies.
- (4) Caring for the mother and new-born infant with emphasis on the nutritional needs.
- (5) Caring for the infant and child whose nursing needs are relatively stable.
- (6) Nursing the patient who requires care due to mental deficiencies or illness. This care should assist the patient in performing those activities of daily living.

Clinical experience will be conducted in hospitals and nursing homes.

Students will pay for their uniforms, books, transportation, insurance, and other necessary expenses.

Plans for enrollment should be made early since all admission requirements must be met before entering the program. Entrance requirements include a personal interview, satisfactory completion of pretesting, and good health as determined by a physical and dental examination. Each entering student must have graduated from high school or possessed a General Education Development certificate.

PRACTICAL NURSING

FIRST SEMESTER	Semester Hours
Introduction to Basic Nutrition 140	
Basic Nursing Skills 141	
Body Structure & Functions 142	
Communications 143	1
Personal & Vocational Relationships 144	
Introduction to Pharmacology 146	
Nursing Care of Geriatric Patient 147	
Intro. to College Life 101	
	Total Hours 17
SECOND SEMESTER	Semester Hours
Nursing Skills 148	
Health and Introduction to Medical-Surgical Nursing 149	
Medical-Surgical Nursing 150	3
Nursing Care of Mother and Newborn 151	
Nursing Care of the Child 152	
Pharmacology 153	
Introduction to Mental Health 145	
Nutrition 158	
	Total Hours 19
Summer session	Semester Hours
Diet Therapy 154	
Personal & Vocational Relationships 155	
Advanced Nursing Skills 156	
Medical-Surgical Nursing II 157	<i>.</i>
Pharmacology 159	
	Total Hours 10



ASSOCIATE DEGREE IN NURSING

The Associate Degree in Nursing Program, offered through the Southern Illinois Collegiate Common Market, is developed as an open-curriculum model and is designed to provide career mobility for persons who have completed a practical nursing program or its equivalency through formal or informal methods. Students will be given an opportunity to validate past experiences through utilization of a comprehensive testing program. After assessment by the nursing faculty, an individualized prescriptive-type educational program will be developed with each student.

This unique program is designed to prepare the student for the practice of nursing as defined in the Illinois Nurse Practice Art and meets the requirements for accredited schools in associate degree nursing in Illinois.

Upon satisfactory completion of the program the student will be eligible to write the Illinois State Board Nursing Examination and to become a Registered Nurse.

FIRST SEMESTER Sem. Hrs Introduction to Conceptual Framework 210 Orthopedic-Dermatological Nursing Interventions 226 Neurological-Sensory Nursing Interventions 213 Cardiovascular Nursing Interventions 228 Respiratory Nursing Interventions 220 *General Education Total Hours 2	Maternal-Neonate Nursing Interventions 223
SUMMER SESSION Sem. Hr Psychiatric Nursing Interventions 227	3 2 2 7

(Suggested order of courses may vary from year to year)

^{*}Required General Education
Physical Science (4 credit hours) Chemistry
Introduction to Anatomy and Physiology (4 credit hours)
Government (3 credit hours)
Psychology (3 credit hours)
Elective (1 credit hour)

INDUSTRIAL ORIENTED OCCUPATIONS

AUTOMOTIVE MECHANIC HELPER

This program is designed to provide the student with the necessary knowledge and skills required of a mechanic's helper. Upon successful completion of this program, the student will be awarded a certificate.

FIRST SEMESTER	Sem. Hrs.	SECOND 9
Shop Safety 115	1	Tune-Up. T
Multi-cylinder Engine Servicing	2 1 1 1 3	Diagnosi
Brakes, Wheel Alignment, Bala	nce and	Internship 1
Suspensions 117	3	•
Auto Power Trains 113	3	
Technical Math 121	4	•
Total	Library 14	

SECOND SEMESTER Tune-Up, Troubleshooting,	Sem.	Hrs
Diagnosis 112		3
Internship 127		5
	otal Hours	



AUTOMOTIVE MECHANICS

This program is designed to provide the student with the necessary knowledge and skills required for employment as an auto mechanic. Upon successful completion of this program, the student will be awarded a certificate.

Shop Safety 115	113 and 3 3	SECOND SEMESTER Auto Blueprint Reading 126 Tune-Up, Troubleshooting, Diagnosis 112	33 633
SUMMER SESSION Manual & Auto Transmissions 123 Air-Conditioning & Heating 114 Internship 127 Auto Shop Management 124 Total Ho	3 5	·	

AUTOMOTIVE SERVICE

This program is designed to provide the student with the necessary knowledge and skills to enable him to perform minor engine repairs and related services. Upon successful completion of this program, the student will be awarded a certificate.

FIRST SEMESTER	Sem. H	Hrs.	SECOND SEMESTER	Sem. Hrs.
Shop Safety 115		1	Tune-Up, Troubleshooting,	
Multi-cylinder Engine Servicin			Diagnosis 112	3
Brakes, Wheel Alignment, Bala	ance and		AC & DC Electrical Systems 116	5 3
Suspensions 117		3	Air-Conditioning & Heating 114	1 3 .
Auto Power Trains 113		_	Auto Shop Management 124	
Technical Math 121			Internship 127	
Fuel & Fuel Systems 119			Total	Hours 16
	l Hours			

DIESEL MECHANICS PROGRAM (OPTION)

This program is designed to introduce mechanics to the operation, service, fuel systems and engine tune-up of various diesel engines.

Upon successful completion of this program, the student will be awarded a Certificate.

FIRST SEMESTER Multi-Cylinder Engines 111 Shop Safety 115	1	SECOND SEMESTER Diesel Engine Operation and Service 128 Diesel Fuel & Fuel Systems 129 Tota	
THIRD SEMESTER Diesel Engine Tune-Up and Diagnosis 130	Sem. Hrs 3 Hours 3		

ASSOCIATE OF APPLIED SCIENCE DEGREE

The preceding certificate programs may be extended into an Associate of Applied Science degree upon successful completion of an additional thirty-two semester hours consisting of at least six semester hours in each of the following areas: Communications, Mathematics and Science, Social Studies (Must include American Government 117), and Humanities.

ELECTRONICS

This program allows for a thorough study of electricity and electronic principles and prepares the student for entry into the many varied fields of electronics.

Emphasis in this program is placed upon practical and theoretical application of electronic principles. Digital electronics and rotating machinery are also emphasized.

Students may complete a course in F.C.C. license preparation (second class license) and radio communications if emphasis in this area is desired.

SECOND SEMESTER

Sem. Hrs.

Sem. Hrs.

FRESHMAN YEAR

FIRST SEMESTER

Basic Electrical Concepts 110 .3 Rotating Machinery I 111 .3 Government 117 .3 Math 114 or Math 115 .5 English 111 .3 Total Hours .17	Basic Electronic Concepts I 112	
SOPHOMORE YEAR		
FIRST SEMESTER Sem. Hrs. Electronic Concepts II 210	SECOND SEMESTER Sem. Hrs. Electronic Concepts III 214	

RECOMMENDED ELECTIVES

Radio Communications 217 F.C.C. License Preparation 218

ASSOCIATE OF APPLIED SCIENCE DEGREE

The preceding certificate programs may be extended into an Associate of Applied Science degree upon successful completion of an additional thirty-two semester hours consisting of at least six semester hours in each of the following areas: Communications, Mathematics and Science, Social Studies (Must include American Government 117), and Humanities.

DRILL PRESS OPERATIONS*

This program is designed to provide the student with sufficient knowledge and skills for employment as a drill press operator. Experience with feeds and speeds, grinding and drilling operations on modern equipment will be provided. Upon successful completion of this program, the student will be awarded a certificate.

LATHE OPERATIONS*

This program is designed to provide the student with sufficient knowledge and skills required for employment as a lathe operator. Upon successful completion of this program, the student will be awarded a certificate.

FIRST SEMESTER Machine Tool Fundamentals Lathe Operations I 117 Milling-Machine Operations Blueprint Reading 131	1163 3 I 1193	SECOND SEMESTER Lathe Operations II 118 Metallurgy and Heat Treatm Technical Math 122 To	ent 123 3	3
Technical Math 121				

16

Total Hours



INDUSTRIAL MACHINIST*

This program is designed to provide the student with sufficient knowledge and skills for employment as a machinist. The student will be prepared to operate various machine tools such as turret lathes, milling machines, and drilling machines. Upon completion of this program, the student will be awarded a certificate.

MILLING MACHINE OPERATIONS*

This program is designed to provide the student with sufficient knowledge and skills for employment as a milling machine operator. Upon successful completion of this program, the student will be awarded a certificate.

FIRST SEMESTER Sem. Hrs. Machine Tool Fundamentals 116	SECOND SEMESTER Sem. Hrs. Milling Machine Operations II 120
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^{*}Available only as part-time evening offerings

ASSOCIATE OF APPLIED SCIENCE DEGREE

The above certificate program may be extended into an Associate of Applied Science degree upon successful completion of an additional thirty-two semester hours consisting of at least six semester hours in each of the following areas: Communications, Mathematics and Science, Social Studies (Must include American Government 117), and Humanities.

ARC WELDING

This program will provide the student with the necessary knowledge and skills required for employment as an arc welder. A certificate will be awarded upon successful completion of the program.

FIRST SEMESTER Arc Welding I 123 Metallurgy and Heat Treatment Technical Math 121. Blueprint Reading 131.	3° 1233° 4 3	SECOND SEMESTER Arc Welding II 124 Low Hydrogen ARC Weldin T	3
	Hours 13		



ASSEMBLY LINE WELDING

This program is designed to provide the student with sufficient knowledge and skills in basic arc welding for employment as an assembly line welder. A certificate will be awarded upon successful completion of the program.

A . 14/ 1 1:	Sem. Hrs.
Arc Welding I 123	3 -
-Metallurgy and Heat Treatment 1	23 2·
Technical Math 121	4
Blueprint Reading 131	
Elective	3
Total H	ours 16

COMBINATION WELDING

This program will provide the student with the necessary knowledge and skills appropriate for employment in the areas of electric and oxyacetylene welding. Students completing this program should have sufficient preparation to become certified welders.

Metallurgy and Heat Treatment 123 3 MI Technical Math 121 4 Ad Blueprint Reading 131 Low	COND SEMESTER Sem. Hrs. c Welding II 124
--	--

ASSOCIATE OF APPLIED SCIENCE DEGREE

The above certificate program may be extended into an Associate of Applied Science degree upon successful completion of an additional thirty-two semester hours consisting of at least six semester hours in each of the following areas: Communications, Mathematics and Science, Social Studies (Must include American Government 117), and Humanities.

GAS WELDING

This program will provide the student with the necessary knowledge and skills required for employment as a gas welder. A certificate will be awarded upon successful completion of the program.

	Sem. Hrs.
Gas Welding and Cutting 120	3 -
Metallurgy and Heat Treatment 123	3
Technical Math 121	4 ·
Blueprint Reading 131	3
Advanced Gas Welding 126	3
	ırs 16

MIG WELDING

This program will provide the student with the necessary knowledge and skills in metallic inert gas welding sufficient for employment as a MIG welder. A certificate will be awarded upon successful completion of the program.

first semester	Sem. Hrs.	SECOND SEMESTER	Sem. Hrs.
Arc Welding I 123	3 .	Arc Welding II 124	3
Metallurgy and Heat Treatment	1123 3	MIG Welding 125	3
Lechnical Math 121	4		otal Hours 6
Blueprint Reading 131	3		
	Hours 13		



BASIC SURVEYING PROGRAM (Cooperative Program)*

This program is designed to provide students with the necessary surveying skills for success in entry level positions in the surveying profession. A wide variety of different types of work, some indoors and some outdoors, are available in the field of surveying. The surveyor may specialize in precise calculations, boundary conflict problems, or construction layout. This program concentrates on land and engineering surveying.

Upon the successful completion of the surveying program, students will be awarded a Certificate of Achievement.

FIRST YEAR

FALL SEMESTER Sem. Hrs. Surveying I (2-6) 110	SPRING SEMESTERSem. Hrs.Surveying II (2-6) 111
SUMMER SESSIONSem. Hrs.Surveying Field Work (0-6) 113	
SECOND YEAR	
FALL SEMESTERSem. Hrs.Blueprint Reading 1313Communications (3-0) 1113Legal Aspects of Surveying 1152Total Hours.8	

^{*}This program is being offered cooperatively by John A. Logan, Rend Lake, Kaskaskia, and Shawnee Colleges.

CONSTRUCTION MANAGEMENT TECHNOLOGY (Cooperative Program)*

This program provides the academic background, technical specialization and actual field experience to begin a career in construction management. Emphasis is placed on current practices and principles necessary to compete successfully in today's construction industry.

Students completing the one-year curriculum are awarded the Certificate of Achievement.

FALL SEMESTER	Credits	SPRING SEMESTER Credits
Construction Estimating 201	3	Communications 112
Construction Blueprint Reading 192		Construction Materials
Construction Materials and		and Methods 102
Methods 101	3	Fundamentals of Labor
Human Relations 128	2	Relations 202
Internship 121	4	Construction Surveying 105
Total Hour	s 15	Internship 122
		Total Hours 16

^{*}This program is offered as a cooperative program with Belleville Area College, Illinois Eastern Community Colleges, Kaskaskia Community College, Lewis and Clark College, Rend Lake College, Shawnee College, Southeastern Illinois College, and State Community College.

PERSONAL AND PUBLIC SERVICE OCCUPATIONS

COSMETOLOGY

The cosmetology program is designed to provide students with the basic knowledge and skills in accordance with the Department of Registration and Education guidelines to train licensed beauticians. A minimum of 1500 contact hours for 36 semester hours college credit will prepare the graduate for the Illinois State Licensing Examination.

Cosmetology Lab 113 , . ,	3	SECOND SEMESTER Cosmetology Theory II 111 Cosmetology Lab 114 Tot	 3 9
THIRD SEMESTER Cosmetology Theory 112 Cosmetology Lab 115	3		



CONSERVATION LAW ENFORCEMENT TECHNOLOGY

A two-year curriculum leading to an Associate of Applied Science degree in conservation law enforcement. This program would prepare the student for a variety of jobs in conservation law enforcement.

FRESHMAN YEAR

HRST SEMESTER Sem. Hrs. Inglish 104 or 111. 3 Intro. to College Life 101 1 Intro. to Crime Control 103 3 Elective 3 Cons. to Nat. Res. 127 3 Health 111 2 Total Hours 15	Am. Government 117
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SUMMER SESSION

Conservation Law Enforcement Internship 248

SOPHOMORE YEAR

FIRST SEMESTER Sem. Hrs. Intro. to Forestry 225	Plant Propagation 231
Criminal Behavior 105 3 Elective 3 Total Hours 15	Survey of Methods in Crime



FOOD SERVICE TECHNOLOGY

This program will provide the student with the necessary knowledge and skills sufficient for entry level employment in a variety of positions in the food service industry. A certificate will be awarded upon successful completion of the program.

FIRST SEMESTER Sem. F	irs.
Services 110	. 3
and Safety 111	. 2
Preparation 112	2
Business Math 115. Food Plant Equipment 115 Nutrition 125	- 2
Total Hours	18
SUMMER SESSION Sem. H Food Services Internship 126 Introduction to Business Management 128	. 5
Total Hours	. 3

SECOND SEMESTER Meat Cutting & Processing 113	Sem.	3
Fish, Eggs, Poultry Cookery 117 Baking 124		3
Cooking Technology 123		3
Total Ho	ours	12

ASSOCIATE OF APPLIED SCIENCE DEGREE

The above certificate program may be extended into an Associate of Applied Science degree upon successful completion of an additional thirty-two semester hours consisting of at least six semester hours in each of the following areas: Communications, Mathematics, and Science, Social Studies (Must include American Government 117), and Humanities.

LAW ENFORCEMENT

This thirty-hour certificate program is designed to provide the student with sufficient background for employment in the law enforcement profession. When considering this program students should be aware of the fact that many law enforcement agencies generally require a person to be twenty-one years of age for employment.

Specialized law enforcement classes in this program may be offered only at night unless a sufficient number of day law enforcement students exist to justify these courses as day offerings.

This program is designed in cooperation with Southern Illinois University. All credit received in this program will be accepted as credit leading to the Associate Degree in law enforcement from the School of Technical Careers at S.I.U.

TIRST SEMESTER Se	m. Hrs.	SECOND SEMESTER	Sem. Hrs.
Sociology 212	3	Speech 111	3
- American Government 117	3	Criminal Law 209	.5
nuroduction to Crime Control 103	3	Lnglish 112	3
tngasn (fl	3	Interpersonal Relations 115	3
Criminal Behavior 105	3	Criminal Law If 210	
Total Hours	15	T 1	Hours 15



SOCIAL SERVICE TECHNOLOGY

This curriculum is designed to prepare students for employment in agencies which provide social services to the community. Upon completion of the program, which leads to the Associate of Applied Science Degree, the graduate is prepared for employment in welfare agencies, municipal recreation programs, social development projects, church-sponsored youth programs, and other private or public enterprises of human welfare.

FRESHMAN YEAR

FIRST SEMESTER Health 111		SECOND SEMESTER English 105 or 112 Science Elective Practical Psychology 214 Introduction to Social Problem Government 117 Tota	
SOPHOMORE YEAR			
FIRST SEMESTER Marriage & Family 227 Introduction to Group Processes Principles of Recreation 223 Human Growth & Development Introduction to Service Agencies Total H	3 2213 3 2283	SECOND SEMESTER Abnormal Psychology 219 Advanced Group Processes 22 Practicum 225 Elective	

RECOMMENDED ELECTIVES

Physical Science 111 Physical Science 112 Biology 111 Speech 111 Speech 212 Introduction to Psychology 221

TEACHER'S AIDE

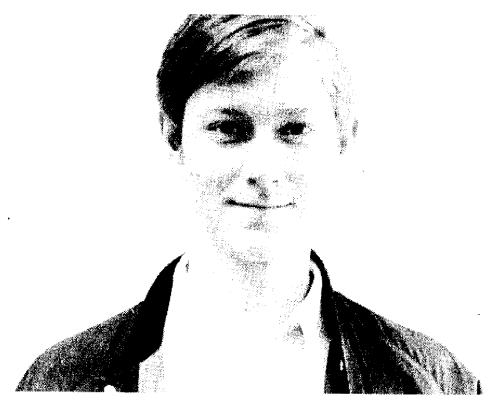
This program is designed to prepare the student for employment as a teacher aide in the Illinois public or private school system. Emphasis will be placed on relevant, practical topics for the future teacher aide. This program meets the basic requirements of the Office of the Superintendent of Public Instruction for a fully approved teacher aid program. A certificate will be awarded upon successful completion of the program.

FIRST SEMESTER English 104 or 111	Sem. Hrs. 3 283
Duties 121	122 3

SECOND SEMESTER	Sem. Hrs.
Electives	6
Practical Psychology 214	3
School Procedures 123	3
Practicum 225	5
Total	Hours 17

RECOMMENDED ELECTIVES

Music 115 Art 114 Literature 211, 212 or 213 Math 111 English 105 or 112 TEA 124 TEA 125 TEA 126 TEA 127



COURSES OF STUDY

AGRICULTURE

AGR 101 Introduction to Small Engine Mechanics

This course will emphasize part identification, construction, operation, hand tool usage, and safety applications of 2 cycle and 4 cycle gasoline engines. Emphasis is placed on single cylinder engine operation.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

AGR 102 Advanced Small Engine Mechanics

This course will acquaint students with overhaul, service and rebuilding of small engines. Emphasis is placed on advanced study of fuel systems, cooling systems, electrical systems, and troubleshooting small engines. This course should be taken to gain advanced knowledge of small engine mechanics.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: AGR 101

AGR 122 Animal Nutrition

Study of the common feeding methods of livestock, including their relation to growth, maintenance and reproduction.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

AGR 123 Soil Science

Fundamental study of the chemical and physical structure of soils of Southern Illinois. Anatomy and physiology of plants. Relationships between soil structure and plant production.

Credit: 3 hours — Two lecture and two lab hours per week.

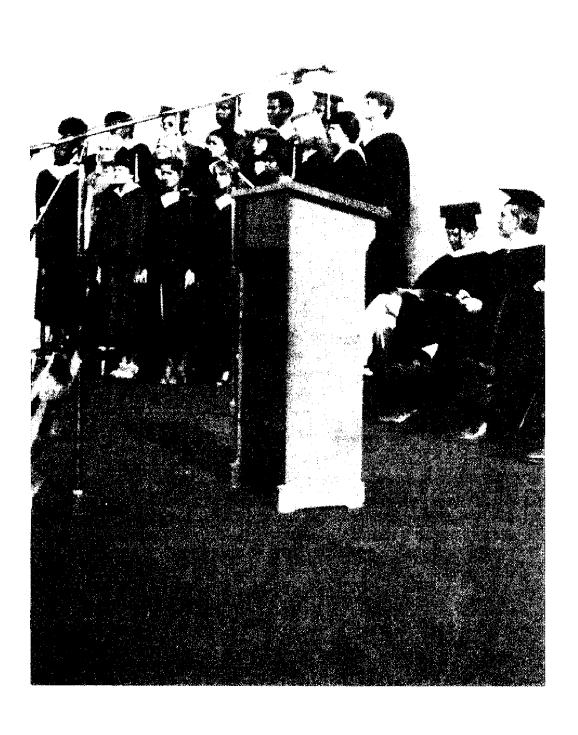
Prerequisite: None

AGR 124 Soil Science

A study of the various methods of soil testing and how the results can be interpreted to make fertilizer recommendations. Investigation of chemical and organic fertilizers and their uses in modern crop production.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Soil Science 123



AGR 126 Agriculture Economics

A study of the role of agriculture in the present economy, nature and size of agricultural industries, future economic prospects for agriculture and government.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

AGR 127 Conservation of Natural Resources

A study of conservation of natural resources at the national, state, and local levels.

Credit: 3 hours — Three lecture hours per week.

AGR 128 Conservation of Water Resources

Study of water sheds, effective methods of controlling floods, pollution and water supplies.

Credit: 3 hours — Two lecture and two lab hours per week.

AGR 129 Surveying

Fundamentals and concepts of surveying as it applies to agricultural usage in conservation practices.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: None

AGR 130 Agriculture Management

A study is made of the methods, characteristics and types of agriculture in Southern Illinois. Assignments are given which assist the student in applying management principles to a farm operation.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

AGR 131 Products, Sales & Service

An introductory course which covers services rendered, product knowledge, display, pricing, advertising farm products, sales and service.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

AGR 132 Crop Science

A study of the fundamental principles underlying the production of agricultural crops.

Credit: 3 hours — Three lecture hours per week.

AGR 222 Grain Production

A detailed study of various crops, their planting, growth, harvest and utilization. The identification of insects and diseases common to crops and how these hazards may be diminished.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Crop Science 132

AGR 223 Animal Science

Production methods of livestock, effects of metabolic processess, infections and parasitic diseases. Selection and genetics of livestock.

Credit: 3 hours — Three lecture hours per week.

AGR 224 Agriculture Mechanics

The operation, construction, adjustment, maintenance and repair of farm machinery and buildings with emphasis placed on repairs, including the use of arc and gas welding.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

AGR 225 Introduction to Forestry

Fundamentals of forestry operations, including principles of stocking, yields, growth, continued production, rotation, and control of cut.

Credit: 3 hours — Three lecture hours per week.

AGR 226 Forest Management

Study of the commercial uses of forest and forest products.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Introduction to Forestry 225

AGR 227 Introduction to Wildlife

Identification of area wildlife including their life cycles, habitats and uses.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

AGR 228 Wildlife Management

A study of the balance of nature, habitat improvement, and control of wildlife and their predators.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Introduction to Wildlife 227

AGR 230 Application and Use of Agriculture Chemicals

A study of the role of chemicals in agriculture, including herbicides, insecticides, seed treatments, and livestock chemicals. Identification of weeds and insects and their prevention, control and eradication.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

AGR 231 Plant Propagation

Study of the natural methods of plant propagation with emphasis upon asexual reproduction.

Credit: 3 hours --- Two lecture and two lab hours per week.

Prerequisite: None

AGR 232 Crops, Lawn and Garden Sales & Service

A course designed to introduce the student to crop seed, lawn and garden seeds, and orchard supplies; their characteristics and utilization factors necessary to adapt to Southern Illinois agricultural practices.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

AGR 233 Agriculture Management & Inventory Control

The economic framework of agriculture businesses: organizing for effective management and management in local businesses; servicing agriculture including the management of custom services, retail credit, purchasing, inventory and customer relations.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Business Organization 119 or consent of the instructor

AGR 240 Agriculture Resources Internship

This course is designed to give the student practical work experience in a position similar to one for which the program is designed to prepare him.

Credit: 4 hours — One lecture and fifteen lab hours per week.

AGR 243 Outdoor Recreation and Park Management

Policy, development and administration of outdoor recreation as encountered in forest, park and wildlands. Topics covered include outdoor recreation, Resource Review Commission report, programs for outdoor recreation and policies for both public and private administration.

Credit: 3 hours — Three lecture hours per week.

AGR 244 Nature Interpretation

Appreciation of nature as an outdoor activity. Interpretation of nature as it relates to the National Park System, National Forests, Wildlife areas and urban sites. Man's current malaise with the natural environment will be stressed.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

AGR 245 Agri-Business Internship

This course is designed to give the student practical work experience in a position similar to one for which the program is designed to prepare him.

Credit: 4 hours — One lecture and fifteen lab hours per week.

AGR 246 Wildlife Technology Internship

This course is designed to give the student practical work experience in a position similar to one for which the program is designed to prepare him.

Credit: 4 hours — One lecture and fifteen lab hours per week.

AGR 247 Animal and Crop Science Internship

This course is designed to give the student practical work experience in a position similar to one for which the program is designed to prepare him.

Credit: 4 hours — One lecture and fifteen lab hours per week.

AGR 248 Conservation Law Enforcement Internship

This course is designed to give the student practical work experience in a position similar to one for which the program is designed to prepare him.

Credit: 4 hours — One lecture and fifteen lab hours per week.

AGR 249 Livestock Selection and Evaluation

A study of the desirable type and economically important characteristics used in selecting, breeding, and slaughtering beef cattle, swine and sheep. Selection of dairy cattle and horses will also be covered.

Credit: 3 hours — One lecture and four lab hours per week.

BIOLOGICAL SCIENCE

BIO 111 Introduction to Biology

This course sequence covers a year's survey of the basic problems faced by all forms of life, whether plant, animal, or microbe, and compares the various alternative "solutions" to these problems as used by a variety of organisms. Emphasis will be on the chemical and cellular basis of life and the biology of organisms.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: None

BIO 112 Biology

A continuation of Biology 111. The emphasis is placed upon the perpetuation of life, population and communities, evolution, the plant kingdom, and the animal kingdom.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Biology 111

BIO 211 Environmental Biology

Environmental biology is ecology. Emphasis is placed upon ecosystems, populations, and communities. Contemporary problems in human ecology are discussed from articles found in periodicals.

Credit: 4 hours — Four lecture hours per week.

Prerequisite: Biology 112

BIO 212 Introductory Human Physiology

The structure and function of organs and systems will be systematically surveyed. The discussions will provide a basic overview of the gross, as well as, the cellular and subcellular components of the human body. The course will be of benefit to students in many disciplines such as biology, medicine, pharmacy, dentistry, psychology and philosophy.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Biology 112

BIO 213 Botany

Introduction to the structure, development, relationships, ecological and economical importances of the algae, fungi, mosses, ferns, and the higher vascular plants. Some work in identification of plants is included.

Credit: 4 hours — Three lecture and two lab hours per week. Prerequisite: Biology 112 or approval of the appropriate dean

BUSINESS

ACC 111 Accounting

An introduction to accounting theory and principles. The successive steps in the accounting cycle. Subjects covered include special journals and ledgers, working papers, adjusting and closing the books, preparation of statements, columnar journals and controlling accounts. Emphasis on internal control notes, interest, inventories, partnerships, depreciation, accruals, and special adjusting entries.

Credit: 4 hours — Four lecture hours per week.

Prerequisite: None

ACC 112 Accounting

A continuation of the study of accounting principles and their application to corporations, manufacturing, payroll, inventories, and income taxes.

Credit: 4 hours — Four lecture hours per week.

Prerequisite: Accounting 111

ACC 211 Accounting

A comprehensive study of financial accounting theory and practice. Subjects covered include foundations of accounting theory, the reporting process, inventories, asset valuations, income determination, corporate information, combinations and consolidations.

Credit: 4 hours — Four lecture hours per week.

Prerequisite: Accounting 112

ACC 212 Accounting

Continued specialization in investments, receivables, current and contingent liabilities, corporate accounting, accounting for bonds, fund accounting, statement preparation, continued financial accounting theory and practice.

Credit: 4 hours — Four lecture hours per week.

Prerequisite: Accounting 211

ACC 220 Business Finance & Credit

A study of finances of a small business operation, source of money, determination of credit needs, records, security and repayment plans.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

ACC 221 Cost Accounting

Job order, process accounting, and standard cost accounting for manufacturing. Theory and technique of costing on actual and normal basis, and distribution costs are presented.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Accounting 112

ACC 222 Auditing

Introduction to the principles involved in preparing audits of various accounts of a business enterprise, verifications and investigations, working papers, audit procedures, report writing and ethics of the profession.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Cost Accounting 221

BUS 115 Business Mathematics

Practice of fundamental mathematical processes with application to their use with percents, discounts, payroll, banking services, notes, simple interest, depreciation, and other typical business calculations.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

BUS 117 Business English

The practical application of English and communication processes to meet the needs of business. Examines written communications by surveying several types of business letters, specialized business correspondence and job application papers. Reviews principles of oral communication. Spelling, language and punctuation are incorporated into the study of business communications.

Credit: 3 hours — Three lecture hours per week

Prerequisite: English 104 or consent of appropriate dean.

BUS 119 Business Organization

Study of organization structure; problems of organizing a business; business opportunities; locating, housing, equipping, laying out production facilities; financing; personnel organization, and government business relations.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

BUS 126 Principles of Marketing

Introduction to the marketing structure as it exists and functions. Emphasis is placed upon the manager's and consumer's influence in marketing functions. The product: packaging and branding, industrial and consumer products, product planning and development.

Credit: 3 hours — Three lecture hours per week.

BUS 128 Introduction to Management

Principles and practices of establishing and operating a business are presented, including opportunities, hazards, and problems which might be encountered. Fundamental considerations, planning, organizing, actuating and controlling management application of principles and techniques to all activities.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

BUS 214 Business Law

Introduction to Law: nature, function, and classification. General understanding of the reasons for some of our laws governing businesses and people involved in business-related activities.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

BUS 215 Business Law

The significant phases of law dealing with partnerships, corporations, unincorporated associations, and related topics. Emphasis is placed on laws which regulate the business enterprise.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Business Law 214 or consent of appropriate dean.

BUS 218 Introduction to Data Processing

This course serves as an introduction to data processing and, presumes that the student has no prior knowledge of data processing. It deals with the nature and matter of computer data processing and how these concepts relate to specific problems today.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

BUS 228 Principles of Sales

Basic principles underlying the sales process are covered. The course is designed to promote an understanding of the salesman's obligation to himself, the company, and the customer.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

BUS 230 Business Internship

The student will work part-time for a period of one or two semesters as an intern in a business firm under the supervision of the staff of the Business Division.

Credit: 4 hours — Fifteen lab and one lecture hour per week.

Prerequisite: Consent of the department chairman.

SEC 120 Records Management

Fundamentals in alphabetic, numeric, geographic and subject filing. Indexing practices and rules which govern retrieval. Transfer, disposal and other management aspects will be covered.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SEC 121 Beginning Typewriting

Typewriter keyboard, techniques of developing speed and accuracy, centering, tables, letters and manuscripts. Minimum 5 minute speed of 35 wpm at end of course. Individualized self-paced method of instruction. Course may be waived based by placement test.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: None

SEC 122 Intermediate Typewriting

A continuation of beginning typing with emphasis on straight copy typing as well as timed production work. Includes letters, tables, memos, forms, reports, stencils, dittos, Minimum 5 minute speed of 45 wpm required at end of course. Individualized self-paced method of instruction. Course may be waived by placement test.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Beginning Typewriting 121 or placement test.

SEC 123 Beginning Shorthand

A complete course in Gregg shorthand theory with brief forms, phrasing and vocabulary. Emphasis on writing speed with typewritten transcription. Minimum 3 minute dictation and transcription at 50 wpm at end of course. Course may be waived by placement test. Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Beginning Typewriting 121 enrollment or completion.

SEC 124 Shorthand and Transcription

Development of dictation and transcription skills. Minimum 3 minute dictation and transcription at 70 wpm at end of course. Includes mailable letter transcription. Course may be waived by placement test.

Credit: 3 hours — One lecture and four lab hours per week. Prerequisite: Beginning Shorthand 123 or placement test.

SEC 125 Business Machines

A laboratory course which includes addition, subtraction, multiplication, and division on the ten-key adding machine, rotary, printing, electronic, and key-driven calculators. Basic skills are applied to payroll, percentage, merchandise, and simple interest prob-

lems. The student gains necessary skill needed for competent business machine operation.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: None

SEC 128 Machine Transcription

Typewriter transcription of prerecorded data from transcription machine into mailable letters. Includes punctuation, spelling, word usage, corrections and other transcription skills.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: Beginning Typewriting 121.

SEC 223 Advanced Typewriting

A continuation of intermediate typing with emphasis on speed development and timed production work. Government, medical, technical, financial and legal correspondence. Minimum 5 minute speed of 50 wpm at end of course. Individualized self-paced method of instruction.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Typewriting 122 or placement test.

SEC 224 Shorthand and Transcription

Increased development of dictation and transcribing skills. Minimum 3 minute dictation and transcription at 90 wpm at end of course. Strong emphasis on mailable letter transcription.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Shorthand and Transcription 124 or placement test.

SEC 225 Shorthand and Transcription

Increased emphasis on mailable letter transcription. Minimum 3 minute dictation and transcription at 110 wpm at end of course.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Shorthand and Transcription 224.

SEC 226 Secretarial Procedures

A comprehensive study of the duties of the secretary. Topics examined include the secretarial profession, duplicating, communications, personality, and human relations. Knowledge, attitudes, and values that are important for competent performance on the job are stressed.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Typing 121 or the equivalent through proficiency testing.

SEC 228 Medical Terminology

Development of a medical vocabulary through the study of word construction, spelling and pronunciation, medical abbreviations and symbols, and use of terminology in correspondence and reports used in the medical profession.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Typing 121 or the equivalent through proficiency testing.

SEC 229 Legal Terminology

Development of a legal vocabulary through the study of word construction, spelling and pronunciation, legal abbreviations and symbols, and use of terminology in correspondence and reports used in the legal profession.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Shorthand 224 and Typing 121 or the equivalent through proficiency testing.

SEC 230 CPS-Office Procedures and Administration

This course will emphasize the knowledge that a secretary must possess pertinent to business data processing, communications techniques, advances in office management, records management, and office systems, layout and design.

Credit: 1 hour — One lecture hour per week.

Prerequisite: One year of full-time secretarial experience or consent of instructor.

SEC 231 CPS-Business and Public Policy

Business law as it applies in the secretary's work-a-day world, and the implications of governmental controls as they impact upon business and office operations will be presented in this course.

Credit: 1 hour — One lecture hour per week.

Prerequisite: One year of full-time secretarial experience or consent of instructor.

SEC 232 CPS-Environmental Relationships in Business

Human relations, group dynamics and how effective communications can contribute to success in dealing with people as it relates to the role and function of the secretary in the office environment will be presented. Emphasis will be placed on the relationship between the secretary or administrative assistant and the supervisor and people the secretary comes in contact with in the business setting.

Credit: 1 hour — One lecture hour per week.

Prerequisite: One year of full-time secretarial experience or consent of instructor.

SEC 233 CPS-Economics and Management

The basic concepts of economics and management underlying the United States business system as it relates to the secretary's role in business will be presented.

Credit: 1 hour — One lecture hour per week.

Prerequisite: One year of full-time secretarial experience or consent of instructor.

SEC 234 CPS-Financial Analysis and Math

Fundamental accounting principles that a secretary must possess in order to assist the supervisor in the preparation, summarization and interpretation of financial data. Emphasis will be also placed on the secretary's application of basic math to business situations.

Credit: 1 hour — One lecture hour per week.

Prerequisite: One year of full-time secretarial experience or consent of instructor.

SEC 235 CPS-Communications and Decision Making

Setting priorities in the office and the role of the secretary or administrative assistant in taking action on these priorities will be presented. Emphasis will be placed on correspondence styles and the production of this correspondence.

Credit: 1 hour — One lecture hour per week.

Prerequisite: One year of full-time secretarial experience or consent of instructor.



COMMUNICATIONS

ENGLISH

ENG 101 Reading Improvement

This is a basic or fundamental course and will be used as a prerequisite for some students. The course is designed to assist the student in developing his reading and study skills to the functional level of achievement necessary for college work. The course provides specific practice required to maintain these skills at a high level. Improvement will be sought in the four areas of reading: vocabulary, comprehension, study skills, and fluency.

Credit: 2 hours — Two lecture hours per week.

Prerequisite: None

ENG 102 Reading Improvement

Continuation of Reading Improvement 101.

Credit: 2 hours — Two lecture hours per week.

Prerequisite: Reading Improvement 101

ENG 104 English

This English course is designed as a basic or fundamental course and will be used as an option to ENG 111 English for vocational students. This beginning course in English grammar and composition includes the fundamental principles of writing and is aimed at helping students who need assistance in the improvement of writing skills.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

ENG 105 English

Continuation of English 104.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: English 104

ENG 111 English Composition

A composition course with stress on language skills—reading, writing, speaking, and listening. Reading and writing fall into the general categories of description, exposition, narration, and argumentation.

Credit: 3 hours — Three lecture hours per week.

ENG 112 English Composition

Continuation of English Composition 111.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: English Composition 111

ENG 221 Technical Writing

A study of the organization and writing of technical materials, with emphasis on description, process, abstract, technical reports and manuals.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

JOURNALISM

JOU 115 Journalism

Emphasis on newswriting, stressing development of terseness and vigor of style. Studying characteristics of outstanding newspapers. Practice in proofreading and layouts. Class publishes the college paper. Typing ability is helpful; some lab work required.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

JOU 116 Journalism

A continuation of Journalism 115. Greater emphasis on writing heads and leads, feature stories, and editorials.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

JOU 211 Sophomore Writing

Study and disciplined practice of the basic techniques of effective imaginative writing and considerable allowance for individual interests. Analysis of rhetorical models, discussion of short stories, and criticism of manuscripts produced by class members.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

JOU 212 Sophomore Writing

A continuation of Sophomore Writing 211.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Journalism 211

SPEECH

SPC 111 Basic Oral Communication

This course is designed to give the student the basic principles of interpersonal communication with emphasis upon the techniques of communication orally. Various types of oral presentation are studied with emphasis upon public speaking. Attention is given to voice, bodily action, organization of material and to the speaker's character and responsibility to society.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SPC 112 Oral Interpretation

Problems and techniques of reading various types of literature orally are studied and practiced.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SPC 113 Introduction to Drama

Modern and ancient plays are studied with emphasis on dramatic conventions and devices used to give form and meaning to human experience.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SPC 114 a.b Forensic Activities

Students engaged in actual communication situations in the community or in interscholastic speech competition may earn one hour credit per semester. A total of four semester hours may be accumulated. Two lab hours per week are utilized to research and practice for speech activities.

Credit: 1 hour — Two lab hours per week.

Prerequisite: None

SPC 211 Group Discussion

A study of the principles, methods, and types of discussion and their application in the solving of modern day problems.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Basic Oral Communication 111 or consent of instructor.

SPC 212 Argumentation and Debate

The principles of argument analysis, evidence reasoning, fallacies, briefing, and delivery are studied and applied in debating experiences.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Basic Oral Communication 111 or consent of instruc-

tor.

SPC 213 Theatre

Attention is given to the various aspects of play production with opportunity to gain experience in one or more of the theatrical arts.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Introduction to Drama 113 or consent of instructor.

SPC 214 a,b Forensic Activities

Continuation of Speech 114 a,b.

Credit: 1 hour — Two lab hours per week.

Prerequisite: None

FOREIGN LANGUAGE

FRN 111 French

An introductory course designed to present the fundamentals of French grammar, vocabulary, and culture. There is constant use of the language in the classroom, with graduated reading and writing.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: None

FRN 112 French

A continuation of French 111 with increased stress on conversation. Aspects of grammar of greater complexity are presented, with readings and reports based on French culture and civilization.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: French 111

FRN 211 French

Continued practice in speaking and reading French following review of basic principles. Occasional oral reports in French graded to students' conversational level. Practice in reading at sight.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: French 112

FRN 212 French

Continuation of French 211.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: French 211

GER 111 German

A beginning course which stresses the conversational approach to the language. Essential grammar is studied and composition is introduced.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: None

GER 112 German

A continuation of German 111.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: German 111

GER 211 German

A review of grammar combined with the reading of selected works of contemporary German authors. Oral expression as well as composition is stressed.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: German 112

GER 212 German

A continuation of German 211.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: German 211

SPA 111 Spanish

An introductory course designed to facilitate conversation from the beginning, with adequate emphasis on writing. The course is taught in Spanish with translation only where necessary.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: None

SPA 112 Spanish

A continuation of Spanish 111. Increased stress on reading in order to inculcate idiomatic use of the language. Constant oral practice.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Spanish 111

SPA 211 Spanish

Intermediate Spanish. Continued major emphasis on conversation with beginning writing.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Spanish 113

SPA 212 Spanish

A continuation of 211. Increased use of contemporary oral and written Spanish material from Latin America.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Spanish 211

























HEALTH OCCUPATIONS

PRACTICAL NURSING

PN 100 NURSE ASSISTANT

This course is designed to acquaint the student with the basic nursing skills and theory necessary for becoming a Nurse Assistant. Learning experiences will focus on direct patient care and are so organized to lead the student in understanding basic health concepts. Adequate time utilized in orientating the nurse assistant student to their work environment and responsibilities will provide a basis for quality patient care and good employee moral.

Credit: 6 hours — Six lecture and three lab hours per week.

PN 140 Introduction to Basic Nutrition

This course is designed to introduce the practical nurse student to the basic food groups and nutritional requirements essential for maintenance of good health.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PN 141 Basic Nursing Skills

This course will provide the concurrent instruction and supervised clinical laboratory experience necessary to meet the nursing needs of patients at an introductory level.

Credit: 6 hours — Five lecture hours and three lab hours per week.

Prerequisite: None

PN 142 Body Structure and Functions

This course is intended to help the practical nurse student give more intelligent nursing care because she better understands the normal functions of the body through a basic knowledge of anatomy and physiology. This basic knowledge will be reinforced and built upon throughout the program.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

PN 143 Communications

This course is directed toward improving the verbal, non-verbal and written communicative skills. It is our intention to encourage the nurse to realize the importance of communications in her daily relationship with her patients, co-workers and family. This course will be integrated into all areas.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PN 144 Personal and Vocational Relationships

This course is aimed at helping the practical nurse student understand others by better understanding herself, thus making her more effective in group action. It introduces a background of nursing history and shows practical nursing as an integral part of nursing on the vocational level.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PN 145 Introduction to Mental Health

Learning to cope with personal fears and anxieties and the development of self-understanding is of utmost importance to the practical nurse student. This course is also designed to create within the practical nurse student an awareness of those mental health resources that are available to assist in meeting the physical and mental health needs of the individual. It also emphasizes the importance of communications and interpersonal relationships between the practical nurse student and the patient and the ability to identify the major classifications of mental illness.

Practice and theory are given in the clinical area and includes the opportunity for observation of the professional team, patient-centered approach and the community approach.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PN 146 Introduction to Pharmacology

This course is designed to develop a clear understanding of the limitations of the practical nurse and to develop a clear and basic knowledge of the safety measures involved in preparation and administration of medicines, the contradictions, sources, usual dosages and usual methods of administration. It also emphasizes the importance of medications, and an ability to observe and report these reactions intelligently.

Credit: 2 hours — Two lecture hours per week.

Prerequisite: None

PN 147 Nursing Care of Geriatric Patient

Recognizing that our geriatric population is increasing due to improved health and health practices, this course is directed toward a knowledge of the basic human needs of the older person, including physical, social, and emotional needs. Not only that the practical nurse might give understanding and competent care, but that she

might develop an awareness of a positive approach toward aging as related to her own life.

Credit: 2 hours — One lecture hour and three lab hours per week.

Prerequisite: None

PN 148 Nursing Skills

A continuation of Basic Skills 141. This course is to familiarize the student with procedures and skills concurrent with the principles underlying their present theory and clinical experience to include the adult patient.

Credit: 3 hours — Two lecture hours and three lab hours per week.

Prerequisite: Basic Skills 141

PN 149 Health & Introduction to Medical-Surgical Nursing

This course is designed to present the basic concepts for maintaining adequate overall personal and community health. Causative factors and measures to control and/or prevent disease will be included. General symptoms of illness, basic principles of caring for the person who is ill, how the body's natural defense mechanisms function and the more commonly used diagnostic aids will complete the course.

Credit: 3 hours — Two lecture hours and three lab hours per week.

Prerequisite: None

PN 150 Medical-Surgical Nursing I

The care of selected adult patients in clinical affiliations and the study of disease conditions, symptoms and diagnostic measures used in such conditions.

Credit: 3 hours — Two lecture hours and three lab hours per week. Prerequisite: Health and Introduction to Medical-Surgical Nursing 149

PN 151 Nursing Care of the Mother and Newborn

This course is designed to develop within the practical nurse student an appreciation of the meaning of good prenatal and postnatal care and an understanding of the total birth process. To develop skills in caring for the mother and the newborn and to learn to recognize deviations from the normal in each. The student will learn the health needs of each and will participate in the teaching of these concepts. This will be accomplished through classroom instruction and clinical experience in the maternity division.

Credit: 3 hours — Two lecture hours and three lab hours per week.

PN 152 Nursing Care of the Child

This course is designed to help the student develop a basic understanding of the normal growth and development of the child, and how illness may interfere with the normal pattern. This understanding will be helpful in evaluation of the physical, intellectual, emotional and social behavior of the child patient. The student learns to care for the sick child using safety precautions, meaningful observations, and suitable nursing techniques. This experience will be accomplished through classroom instruction and clinical experience in the pediatric division and through the observance of the well child in the kindergarten.

Credit: 3 hours — Two lecture hours and three lab hours per week.

Prerequisite: None

PN 153 Pharmacology

This is a course in theory and practice that offers a basic understanding of the principles of medication administration. It covers the basic information concerning the main effects, uses and dosages of the more common drugs. Practical experience will include administration of medications, observing and recording.

Credit: 2 hours — One lecture hour and two lab hours per week.

Prerequisite: Introduction to Pharmacology 146

PN 154 Diet Therapy

This course is designed to develop a clear understanding of the basic concepts of treatment of disease by diet.

Credit: 1 hour — One lecture hour per week.

Prerequisite: Introduction to Basic Nutrition 140 and Nutrition 158

PN 155 Personal & Vocational Relationships

A continuation of Personal and Vocational Relationships 144. This course develops within the student an awareness of duties, responsibilities, limitations, ethical and legal aspects, career opportunities and requirements, and nursing organizations.

Credit: 1 hour — One lecture hour per week.

Prerequisite: Personal and Vocational Relationships 144

PN 156 Advanced Nursing Skills

This course offers the student advanced nursing theories concurrent with their clinical application. Techniques of charting, transcribing and team nursing as they relate to the duties of practical nursing are presented. In addition, skills relating to nurses station desk duties are developed.

Credit: 2 hours — One lecture hour and three lab hours per week.

Prerequisite: Nursing Skills 148

PN 157 Medical-Surgical Nursing II

This course is a continuation of Medical-Surgical Nursing I 150. Credit: 6 hours — Four lecture hours and six lab hours per week.

Prerequisite: Medical-Surgical Nursing I 150

PN 158 Nutrition

This course is designed to present information concerning the modification of the normal basic diet to meet the therapeutic needs of the patient; the interpretation of a diet order in terms of daily foods and meals; and the many factors involved in feeding the sick.

Credit: 1 hour — One lecture hour per week.

Prerequisite: Introduction to Basic Nutrition 140

PN 159 Pharmacology

A continuation of Pharmacology 153. This course presents information concerning the effect of drugs on various body systems; expansion of knowledge concerning drugs most commonly used in the treatment of major diseases, their main effects, dosages, contraindications and dangers.

Credit: One hour — One lecture per week.

Prerequisite: Introduction to Pharmacology 146 and Pharmacology

153

ASSOCIATE DEGREE NURSING

ADN 210 Introduction to Conceptual Framework

Using the individualized modular approach to education, this course introduces the student to the concepts which are the foundation of the nursing curriculum. Emphasis is placed on the exploration and study of basic human needs and the components of the nursing process. Learning opportunities include both theory content and selected clinical experience.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Acceptance into the Associate Degree Nursing Program.

ADN 213 Neurological-Sensory Nursing Interventions

This course is designed to further the student's knowledge of neurological and sensory function and those associated disorders commonly encountered in nursing practice. Emphasis will be placed upon the development of neurological assessment skills and the use of the nursing process for care of patients with major neurological and sensory dysfunction. Learning opportunities include both theory content and selected clinical experiences.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: Introduction to Conceptual Framework

ADN 217 Metabolic-Endocrine Nursing Interventions

This course is designed to further the student's knowledge in metabolic-endocrine function and those associated disorders commonly encountered in nursing practice. Emphasis will be placed upon application of the nursing process in caring for patients experiencing metabolic-endocrine dysfunction. Learning opportunities include both theory content and selected clinical experiences.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: Introduction to Conceptual Framework

ADN 218 Community Health Nursing

This course is designed to introduce the student to concepts in the community health nursing. The student will learn that the health and well-being of citizens in the community is an integral part of nursing. The problem-solving approach will be applied to identify health problems of clients in a variety of community clinical agencies and settings with special emphasis on community resources for special health problems, communicable diseases, problems accompanying disasters, and special problems of senior citizens.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: Introduction to Conceptual Framework.

ADN 220 Respiratory Nursing Interventions

This course is designed to provide the student with further study of pulmonary function and principles of pathophysiology pertaining to common respiratory problems. Emphasis will be placed on the application of the nursing process in caring for patients experiencing respiratory restriction or obstruction. Learning opportunities include both theory content and selected clinical experiences.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: Introduction to Conceptual Framework

ADN 222 Nursing Today and Tomorrow

Leadership in nursing, transition into the new graduate role, and current issues in nursing are the integral components of the terminal course of this program. The student will be given an opportunity to apply their knowledge and nursing skills in a practical experience.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: Introduction to Conceptual Framework and Consent of the Instructor.

ADN 223 Maternal-Neonate Nursing Interventions

This course is designed to provide the student with greater depth and broader perspectives of the antepartal, intrapartal, postpartal neonatal periods. A basic understanding of normal reproductive

function and birth process will be necessary in order to study the nursing care of pathophysiological conditions. Emphasis is placed upon the family involvement and cultural needs of the child bearing family. Learning opportunities include both theory and selected clinical experiences.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: Introduction to Conceptual Framework.

ADN 224 Pediatric Nursing Interventions

This course is designed to provide the student with specific aspects of growth and development. The nursing process will be utilized to provide nursing care to meet the physical, intellectual, emotional, and social needs of the pediatric patient. Emphasis will be placed upon health promotion, family involvement, and cultural needs of the hospitalized child and/or adolescent. Learning opportunities include both theory content and selected clinical experiences.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Introduction to Conceptual Framework.

ADN 225 Gastrointestinal/Genital-Urinary Nursing Interventions

This course is designed to provide the student with further study and depth into gastrointestinal and genital-urinary function and into their associated pathophysiological processes. Emphasis will be placed upon assessing, analyzing, planning, implementing and evaluation nursing care for patients with common gastrointestinal and genital-urinary disorders. Learning opportunities include both theory content and selected clinical experiences.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Introduction to Conceptual Framework

ADN 226 Orthopedic-Dermatological Nursing Interventions

This course is designed to further the student's knowledge of skeletal, muscular and skin function and those disorders commonly encountered in nursing practice. Emphasis will be placed upon assessing, analyzing, planning, implementing, and evaluating nursing care for those patients experiencing disorders associated with joints, bones, muscles, and skin. Learning opportunities include both theory content and selected clinical experiences.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Introduction to Conceptual Framework

ADN 227 Psychiatric Nursing Interventions

This course is designed to provide the student with further exploration and study into the concepts of mental health and mental illness. Emphasis will be placed upon developing skills in therapeutic communication techniques, principles of psychiatric nursing, interpersonal relationships, and identifying psychosocial needs of the emotionally ill patient. Learning opportunities include both theory content and selected clinical experiences.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Introduction to Conceptual Framework.

ADN 228 Cardiovascular Nursing Interventions

This course is designed to provide the student with further study and depth into cardiovascular function and common pathophysiological processes. Emphasis will be placed upon the application of the nursing process, health maintenance, and disease prevention. Learning opportunities include both theory content and selected clinical experiences.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Introduction to Conceptual Framework.

NUR 290 Physical Diagnosis

This course is designed to provide the professional nurse with the necessary knowledge and skills to conduct a physical examination and to provide a tentative diagnosis of possible illness and/or injury of a patient. Topics to be covered include, but are not limited to history taking; general evaluation; examination of the ear, eye, nose, throat, chest, heart and abdomen. This course is highly recommended for public health nurses, school nurses, and other professional nurses whose job requires the administration of physical examinations.

Credit: 2 hours — Two lecture hours per week.

Prerequisite: Registered Nursing or Licensed Practical Nursing

HEALTH

HLT 111 Health

An introduction to personal health and hygiene. Problems of smoking, alcohol, and drug usage are discussed.

Credit: 2 hours — Two lecture hours per week.

Prerequisite: None

HLT 125 First Aid

This course is designed to acquaint the student with basic first aid. Lectures, demonstrations and practice in laboratory situations will be used as methods of instruction.

Credit: 1 hour — One lecture hour per week.

PHYSICAL EDUCATION

PE 100 Physical Education

A basic co-educational program in physical education which emphasizes essentially carry-over activities. Recreational aspects of activities including badminton, golf, bowling, tennis, and other related sports.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 101 Bowling

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of bowling.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 102 Beginning Tennis

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of tennis.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 103 Intermediate Tennis

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of tennis. Students enrolled in this course will be expected to have the ability to execute basic fundamentals and techniques and greater emphasis shall be placed upon playing strategy.

Credit: 1 hour — One lecture hour per week.

Prerequisite: Beginning Tennis

PE 104 Golf

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of golf.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 105 Badminton and Deck Tennis

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of badminton and deck tennis. Badminton will be taught the first nine weeks and deck tennis will be taught the last nine weeks.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 106 Volleyball

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of volleyball.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 107 Archery

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of archery.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 108 Stunts and Tumbling

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of stunts and tumbling.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 109 Football: Flag and Touch

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of flag and touch football.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 110 Basketball

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of basketball.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

PE 112 Softball

A basic activity course designed to serve all students in the college. Significant consideration is given the basic fundamentals and techniques of basketball.

Credit: 1 hour — One lecture hour per week.

HUMANITIES

ART

ART 111 Basic Studio-Drawing

A studio course designed for the beginner. This course is meant to develop the drawing skill; emphasis is placed on composition, line, texture, shape and form. Media explored will be graphite, charcoal, conte crayon, and pen and ink.

Credit: 3 hours — Three studio hours per week.

Prerequisite: None

ART 112 Basic Studio-Painting

A studio course designed for the beginner in painting; emphasis is placed on the knowledge of the color theory and various painting techniques. Media explored will be tempera paint, water colors, acrylics, oils, collage.

Credit: 3 hours — Three studio hours per week.

Prerequisite: ART 111 or permission of instructor (based on examples of student's drawings.)

ART 113 Basic Studio—Pottery and Sculpture

A basic course designed to introduce the beginner to the third-dimension. Emphasis is on the use of materials, balance and form in a sculpture. Materials used are found objects, wood, stone, plaster, metal and clay. Hand-built and wheel-thrown pottery is constructed.

Credit: 3 hours — Three studio hours per week.

Prerequisite: None

ART 114 Art Appreciation

Painting, sculpture and architecture from Paleolithic to the present. Intended to provide acquaintance with, and introduction to, the aesthetic attitude toward the arts of the past and contemporary life. Art forms are examined both for their individual qualities and the manner in which they exemplify changes in Western culture patterns.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

ART 115 Basic Studio—Design and Crafts

An exploration of the elements of art (line, color, texture, shape, and form) and the principles of design through crafts, two-dimensional designs and three-dimensional designs.

Credit: 3 hours — Three studio hours per week.

ART 211 Advanced Studio—Drawing

A studio course designed to develop the drawing skill with emphasis on the study of two-dimensional products, abstract approaches to drawing and personal expression. The human figure as subject matter will be emphasized. Various drawing media are explored.

Credit: 3 hours — Three studio hours per week.

Prerequisite: Art 111

ART 212 Advanced Studio—Painting

A studio course exploring various painting techniques and media (water-colors, acrylics, oils, and collage). Emphasis is placed on special problems in color theory, composition, surfaces, subject matter and personal expression.

Credit: 3 hours — Three studio hours per week.

Prerequisite: Art 112

ART 213 Advanced Studio—Pottery and Sculpture

A studio course to develop the student's skill in pottery and sculpture. Technical problems in throwing, firing and glazing are emphasized. In sculpture, emphasis is on the use of various materials, textures, balance and form.

Credit: 3 hours — Three studio hours per week.

Prerequisite: Art 113

ART 215 Advanced Studio—Design and Crafts

A studio course using the elements of art and the principles of design in the construction of crafts, two-dimensional and three-dimensional designs. Areas explored are batik, macrame, silk screen, linoleum block, and graphic design.

Credit: 3 hours — Three studio hours per week.

Prerequisite: Art 115

THE ART DEPARTMENT MAY RETAIN STUDENTS' WORKS FOR USE IN ART EXHIBITS.

LITERATURE

LIT 211 Introduction to Poetry

Poetic forms, themes and styles are studied to enhance the student's understanding and appreciation of poetry.

Credit: 3 hours — Three lecture hours per week.

LIT 212 Modern Fiction

Representative novels and short stories are examined and studied in terms of style, structure, and contribution to modern civilization.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

LIT 213 Introduction to Drama

A study of representative plays with emphasis on dramatic literary form and dialogue. Student may also gain experience in creating dramatic dialogue.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

LIT 214 English Literature

A survey of English Literature from its early beginnings through James Boswell.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

LIT 215 English Literature

Eighteenth century poets through the writers of the present.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

LIT 216 American Literature

A study of writers and literary documents that contribute to an understanding of the American heritage from the Colonial beginning to the Civil War period.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

LIT 217 American Literature

Continuation of English 216 from the Civil War to the present.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

LIT 218 World Literature

A comprehensive survey of representative masterpieces of world literature of the Middle Ages and Renaissance.

Credit: 3 hours — Three lecture hours per week.

MUSIC

MUS 111 College Choir

Membership in the college choir is open to all students with approval from the instructor. Members rehearse and perform music of all styles from renaissance to rock and develop basic singing techniques. May be repeated for credit not to exceed total of four credits.

Credit: 1 hour — Two lab hours per week.

Prerequisite: None

MUS 112 Fundamentals of Music

A study of how sounds are combined to produce music through the actual processes of composing and performing. Basic music reading, notation, scales, and chords are studied and applied. Suitable for pre-teachers and non-music majors.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

MUS 113 Harmony, Ear Training & Sight Singing I

Study of traditional diatonic tonal materials and standard notational practice: intervals, scales, chords, chord roots, theory of chord inversion. Includes lab in sight singing, ear training, dictation and keyboard skills.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Music 112, or demonstrate proficiency of Music 112

MUS 114 Harmony, Ear Training & Sight Singing II

Beginning study of four part writing, theory of chord succession, structure of harmonic cadence, key systems, modal structured, seventh chords. Harmonic analysis of simple scores. Continuation of common diatonic materials in keyboard, ear training, and sight singing skills. Standard chord progressions at the keyboard.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Music 113

MUS 115 Music Appreciation

A course designed to help the student to become a more sensitive listener. Aural perception of musical sound events, relationships and structures emphasized. Also a survey of musical forms with a study of music in regards to other art forms.

Credit: 2 hours — Three lecture hours per week.

Prerequisite: None

MUS 116 Applied Class

Class instruction in applied study of voice, piano, organ, guitar, brass, woodwinds, percussion, strings.

Credit: 1 hour — One hour per week.

Prerequisite: None

MUS 117 Private Study

Private applied instruction in voice, piano, organ, guitar, band, or orchestra instruments.

Credit: 1 hour — One half hour per week.

Prerequisite: Enrollment in music major program and consent of appropriate dean.

MUS 118 Survey of Music Literature

Musical forms and styles analyzed through listening to examples from leading composers of each historical period.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Music 113.

MUS 119 ab Chamber Singers

Membership is open to a select group of students. Designed to give experience with music written for the small ensemble, from Madrigals to pop. Members required to participate in College Choir. Chamber Singers give public performances.

Credit: 1 hour — One half hour per week.

Prerequisite: Membership concurrently in College Choir.

MUS 213 Harmony, Ear Training & Sight Singing III

Part writing and harmonizing melodies, theory of chord succession, and analysis of scores using chromatic materials. Keyboard, ear training, sight singing and dictation using chromatic materials.

Credit: 4 hours — Four lecture hours per week.

Prerequisite: Music 114 and 2 semesters of class or private piano.

MUS 214 Harmony, Ear Training & Sight Singing IV

Original composition utilizing skills and knowledge of Music 213. Introduction of Twentieth Century materials.

Credit: 4 hours — Four lecture hours per week.

Prerequisite: Music 213 and 2 semesters of class or private piano.

PHILOSOPHY

PHI 215 Philosophy

Study of chief patterns of philosophic thought. Discussion of persistent problems of philosophy illustrated in the writing of major thinkers from Greece through the 20th Century.

Credit: 3 hours — Three lecture hours per week.

MATHEMATICAL SCIENCE

MAT 101 Introduction to Algebra

A course in the algebraic fundamentals. It is designed for students who have had no algebra or who desire a review of this material.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

MAT 102 Basic Mathematics

A course in basic mathematics. No algebra. Material includes an analysis of the decimal number system; addition, subtraction, multiplication, and division; work with decimals, percents, ratios and proportions, measurement, equations, and formulas.

Credit: 3 hours Prerequisite: None

MAT 111 Foundations of Mathematics

Designed for elementary teaching curricula. Emphasis is on mathematics as a subject viewed as a whole. The newer mathematical concepts, techniques, and terminology associated with elementary mathematics are introduced and analyzed.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

MAT 113 Slide Rule

Fundamental operations on the log-log slide rule.

Credit: 1 hour — One lecture hour per week.

Prerequisite: Knowledge of logarithms & trigonometry.

MAT 114 Intermediate Algebra

Basic set theory, fundamental algebraic operations, linear equations, worded problems, factoring, fractions, exponents, logarithms, radicals, complex numbers, quadratic equations, inequalities, functions and graphs, systems of equations and special functions.

Credit: 5 hours — Five lecture hours per week.

Prerequisite: Introduction to Algebra 101 or high school algebra.

MAT 115 College Algebra & Trigonometry

Sets, notation and operation, the algebra of numbers as a logical system, inequalities, absolute value, coordinate systems, functions and graphs, the circular functions, trig identities, linear and quadratic equations, determinants, binomial theorem, mathematical induction, complex numbers, inverse functions, arithmetic and geometric progressions, exponents and logarithms.

Credit: 5 hours — Five lecture hours per week.

Prerequisite: Intermediate Algebra 114 or satisfactory math background in high school.

MAT 117 Analytic Geometry & Calculus

Introduction to analytic geometry, slope, straight line, the conic sections, functions, limits, continuity, fundamental differentiation, differentiation formulas, and applications of Rolle's theorem and Mean Value theorem.

Credit: 5 hours — Five lecture hours per week.

Prerequisite: College Algebra & Trigonometry 115 or satisfactory math background in high school and consent of instructor.

MAT 121 Technical Mathematics

An introduction to the basic concepts of mathematics as applied to the concepts of technology. Included will be such topics as basic algebraic operations, functions and graphs, the meaning of an equation, linear equations, exponents and radicals, and quadratic equations.

Credit: 4 hours — Four lecture hours per week.

Prerequisite: None

MAT 122 Technical Mathematics

Further development of mathematical concepts in which the student is introduced to trigonometry, logarithms, systems of equations, inequalities, ratio and proportion.

Credit: 4 hours — Four lecture hours per week.

Prerequisite: Technical Mathematics 121

MAT 139 Finite Math

Set concepts and operations, combinations, permutations, elementary probability theory, systems of linear equations, finite Markov chains, introduction to linear programming.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Intermediate Algebra 114 or two years of high school algebra.

MAT 210 General Elementary Statistics

Introduction to the theory of statistics. Common statistical measures, probability, the binomial distribution, the normal distribution, one-sample and two-sample hypothesis testing, confidence intervals, correlation, and prediction.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: MAT 115 or MAT 139

MAT 211 Analytic Geometry and Calculus

Analytic geometry extended, applications of derivatives, maxima, minima, implicit differentiation, concavity, antiderivatives, definite integrals, fundamental theorem of integral calculus. Application of definite integrals, transcendental functions.

Credit: 5 hours — Five lecture hours per week. Prerequisite: Analytic Geometry & Calculus 117

MAT 212 Analytic Geometry and Calculus

Introduction to conics and application of conics, techniques of integration, polar coordinates, parametric equations and vectors, indeterminate forms, improper integrals, multiple integrals, infinite series, partial differentiation, differential equations, three dimension space and linear algebra.

Credit: 5 hours — Five lecture hours per week. Prerequisite: Analytic Geometry & Calculus 211

PERSONAL AND PUBLIC SERVICE OCCUPATIONS

SOCIAL SERVICE TECHNOLOGY

SST 121 Introduction to Social Work

A survey of the field of social work describing the historical development of social work from the early English Poor Laws through contemporary American practices. In addition, interviewing skills are developed through role playing.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SST 122 Introduction to Social Problems

A study of the major social problems in the American society, including historical perspective, etiology, and proposed plans of resolution. Sociological theory and research are also considered.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SST 221 Introduction to Group Processes

An introduction to the process of social group work to include fundamental methods, techniques, and skills with emphasis on the concepts and principles as practiced in the modern social agency.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

SST 222 Advanced Group Processes

A continuation of Group Processes 221. Added emphasis is placed on modern practices of personalizing the learning process to develop more effective relationships.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Group Processes 221

SST 223 Principles of Recreation

A study of principles involved in organizing and supervising recreational programs for community agencies. Practical experience will be gained through fieldwork.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

SST 224 Introduction to Service Agencies

This course is designed to study the relationship of effective leadership to effective community service, the decision-making process, and the principles at work in local and state governments. Field trips, work shops, and discussions of allied facilities constitutes the major portion of this course.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SST 225 Practicum

A community agency-based experience providing practice under the supervision of a trained practitioner. The student participates in staff activities, planning, recording, evaluating, group leading, and other agency tasks. Included in this practicum will be one seminar session per week for the purpose of discussing problems encountered during the work experience portion.

Credit: 4 hours — One lecture hour, fifteen lab hours per week.

Prerequisite: Sophomore standing in Social Service Technology Program

SST 227 Marriage & Family

The historical development of the American family is briefly studied including comparisons with other cultures. The primary emphasis is upon changes which have occurred in the family during the 20th century, factors causing the change, effects of it, and future trends.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SST 228 Human Growth & Development

A systematic study of behavior from conception through adolescence is conducted with emphasis on physical, social, emotional, and intellectual growth and development. Attention is directed to both normal and abnormal development in each of the above areas. Research methods and cross-cultural comparisons are considered as they relate to the development process.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

PHYSICAL SCIENCE

PHS 111 Physical Science

This lecture course is an introduction to the basic concepts of chemistry with emphasis on atomic structure and the behavior of matter. It should be taken by non-science majors and science majors with very limited science background.

Credit: 4 hours — Three lecture and two lab hours per week.

PHS 112 Physical Science

This lecture course is an introduction to the basic concepts of physics with emphasis on types of energy and their properties.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: None

AST 111 Introduction to Astronomy

A non-mathematical course in astronomy designed for students in any curriculum. It contains much material of importance for elementary teachers. The course includes a study of the sun and its planets together with a study of the stars and the nebulae beyond the sun. Evening observation of the moon and planets with the telescope and field glasses, together with the study of about 20 constellations, is a main part of the course.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: None

CHE 114 Inorganic Chemistry

This course is designed for persons interested in any of the sciences including engineering, pre-medical and pre-dental majors. Emphasis is on quantitative measurement of chemical composition, the structure of matter, the relationship between the periodic table and properties of elements and the nature of chemical bonds. Laboratory experiments are designed to give the student experience in handling many of the analytical tools used in industry today.

Credit: 5 hours — Three lecture and four lab hours per week.

Prerequisite: Physical Science 111 or high school chemistry and two units of high school algebra or Intermediate Algebra 114.

CHE 115 Inorganic Chemistry and Qualitative Analysis

A continuation of Chemistry 114. Deals primarily with the various groups of elements and reactions which they undergo, and with the separation of elements on the basis of the solubility of their salts. The laboratory experiments are qualitative in nature.

Credit: 5 hours — Three lecture and four lab hours per week.

Prerequisite: Inorganic Chemistry 114

CHE 211 Organic Chemistry

Preparation and chemical properties of alipathic and aromatic compounds. Emphasis in the nature of the covalent bond and reaction of functional groups. Laboratory consists of synthesis and identification of organic compounds.

Credit: 4 hours — Three lecture and two lab hours per week. Prerequisite: Inorganic Chemistry and Qualitative Analysis 115.

CHE 212 Organic Chemistry

Continuation of Chemistry 211.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Organic Chemistry 211

GEO 213 Geology

Fundamentals of physical geology with emphasis on geologic principles and processes.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

GEO 214 Geology

Continuation of Geology 213.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Geology 213

PHY 216 Physics

A general course in physics intended for those students who desire a major or minor in physics, mathematics majors, pre-engineering students, and other pre-professional students who require a basic course in college physics. The first semester course is a study of the basic laws of mechanics, heat, and sound, with considerable emphasis on the solution of problems. Topics covered include rectilinear motion, rotation, momentum, work and energy, heat, laws of thermodynamics, and wave motion.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Mathematics 115 and Inorganic Chemistry 114 or approval of appropriate Dean.

PHY 217 Physics

Basic laws of electricity and magnetism, light and atomic and nuclear physics. Topics covered include electric and magnetic fields, direct current and alternating circuits, physical and geometrical optics, and atomic and nuclear physics.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Physics 216

SOCIAL SCIENCES

SEM 101 Introduction to College Life

The student is introduced to the educational opportunities and facilities of the college: social activities, scholarships, study methods, college transfer requirements, and job opportunities. Introduction to College Life is a non-transferable requirement for all graduates of Shawnee College.

Credit: 1 hour — One lecture hour.

Prerequisite: None

SSC 102 American Social Structure

An introduction to social science, with a general sociological perspective, focusing attention on economic theory, history, political science, and psychology. Emphasis on the structure and function of social institutions, particularly American society.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SSC 104 American Ethnic Groups

American Ethnic Groups is a course designed to foster an awareness and understanding of the major minority groups (Black Americans, Japanese Americans, Mexican Americans, and the American Indians) in the United States. This course will emphasize the historical background, culture, and achievements of these groups.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

ANT 216 Anthropology

An introduction to and survey of the nature of man, his origins and culture with the main emphasis on cultural anthropology.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

ECO 211 Economics

Macro-economics: American capitalism, money, banking, economic growth, national income, and fiscal policy.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

FCO 212 Economics

Micro-economics, including a study of business cycles, fiscal policies, money-banking and monetary policies, economic growth, and international economics.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Economics 211

ECO 213 American Economic History

A study of the development of economic institutions in the United States emphasizing the changing structure and performance on the economy.

Credit: 3 hours — Three lecture hours per week.

GRY 214 Introduction to Physical Geography

A study of the primary regions of the world which includes such physical factors as topography, climate and vegetation within each region.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

HIS 116 Western Civilization

A survey of social, economic, political, and cultural development of the Western world from earliest times to 1715.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

HIS 117 Western Civilization

A continuation of Western Civilization 116 emphasizing social, economic, political, and cultural development of the Western world, from 1715 to the present.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

PSY 219 Abnormal Psychology

An examination is made of behavior patterns which aid or interfere with personal efficiency. In order to understand the developmental nature and dynamics of these responses attention is focused upon abnormal behavior and various techniques of therapy.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

SOC 212 Sociology

Basic principles of social organization with reference to communities, social institutions, social stratification, concepts of culture, collective behavior and social change in the contemporary societies.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

HIS 214 History of the United States

A study of the major political, social, and economic development of the U.S. to 1865.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

HIS 215 History of the United States

A continuation of History 214, emphasizing the political, social, and economic developments from 1865 to the present.

Credit: 3 hours — Three lecture hours per week.

GOV 117 Introduction to American Government

A survey of political institutions to include forms and functions of the three levels of government: national, state, and local. Throughout the course, stress will be placed on the right and responsibility of citizenship in the democratic process. Meets the requirements relative to the constitutions of the State of Illinois and the United States as required by Senate Bill 95.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

GOV 118 Comparative Government

A course dealing with the major governments of modern Europe and Asia with reference to the study of political institutions and dynamics of political behavior.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

PSY 211 Introduction to Psychology

An introduction to the study of human behavior, with emphasis on basic psychological principles. Topics such as learning, motivation, intelligence, special senses, and perception are considered.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

PSY 214 Practical Psychology

Basic concepts as it applies to human relations, employee organizations and working conditions. Problems of discipline, communications, motivation, authority, social change, and teamwork are examined through case studies.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

PSY 219 Abnormal Psychology

An examination is made of the development of both adaptive and maladaptive behavior patterns. Primary emphasis is devoted to the classification, symptoms, etiology, and treatment of maladaptive behavior.

Credit: 3 hours — Three lecture hours per week.

INDUSTRIAL ORIENTED OCCUPATIONS

DRAFTING

DRA 120 Fundamentals of Drafting

A study of basic drafting techniques involved in freehand and instrument drawing. Subjects included are: use of instruments, lettering, geometrical construction, orthographic projection, pictorial drawing, auxiliary views, sections, and dimensioning.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

DRA 121 Architectural Drafting

An introduction to the basic fundamentals of architectural drawing. Subjects included are: drafting techniques, living area, service area, floor plans, elevations, pictorials, location plans, sections, and foundations.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Fundamentals of Drafting 120

DRA 122 Architectural Drafting

Continuation of Architectural Drafting 121 with selected individual projects of a more complex nature. Subjects included are: framing plans, schedules and specifications, building codes, electrical plans, air-conditioning plans, plumbing diagrams, modular plans, and design theory.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Architectural Drafting 121

DRA 124 Materials and Methods of Construction

Introduction to materials and products used in wood frame, masonry, concrete, and metal construction. Standards of construction and construction estimating will also be included.

Credit: 5 hours — Four lecture and two lab hours per week.

Prerequisite: Fundamentals of Drafting 120

DRA 127 Engineering Graphics

An application of descriptive geometry to problem solving. Subjects included are: reference planes, lines, planes, points, auxiliary views, revolution, force diagrams, cylinders, cones, spheres, curved surfaces, intersections, developments, mining, geology, and civil engineering.

Credit: 4 hours — Two lecture and four lab hours per week.

Prerequisite: Fundamentals of Drafting 120

DRA 131 Blueprint Reading

The fundamentals of blueprint reading involving the meaning of lines, symbols, notes, and specifications as applied to industry in the area of machine and construction blueprint reading.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Fundamentals of Drafting 120

DRA 134 Mechanisms and Machine Design

This course concentrates on the elements of machine design through problems involving the analysis of motions required and the selection of suitable mechanisms, materials and joining requirements.

Credit: 4 hours — Two lecture and four lab hours per week.

Prerequisite: Fundamentals of Drafting 120

DRA 135 Mechanical Drafting

A continuation of Fundamentals of Drafting 120. Subjects included are: basic machine elements, precision and limit dimensioning, weldments, power and motion machine elements, piping drawings, and simplified drafting practices.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Fundamentals of Drafting 120

DRA 136 Electric, Hydraulic, and Pneumatic Controls

A study of standard electrical, hydraulic and pneumatic elements commonly used to provide and control power in machinery and equipment. The student will learn how the elements work as well as become familiar with the nomenclature and symbols involved.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Fundamentals of Drafting 120

DRA 137 Jig, Fixture, and Die Design

A study of the common types of drill jigs, milling fixtures, and cutting and forming dies with emphasis on the design and preparation of working drawings of the production objects.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Fundamentals of Drafting 120

AUTOMOTIVE MECHANICS

AUT 111 Multi-Cylinder Engine Servicing

The study of two, four, six and eight cylinder engines. Emphasis is on providing background in the design and operation of gasoline engines. Participation in disassembly of engines and use of shop manuals will be covered.

Credit: 3 hours — Two lecture and two lab hours per week.

AUT 112 Tune-Up, Troubleshooting, & Diagnosis

Diagnosing automotive engine and ignition conditions using electronic testing equipment. Emphasis on operation of equipment, troubleshooting, repairing and tune-up.

Credit: 3 hours — Two lecture and two lab hours per week.

AUT 113 Automotive Power Trains

Study of clutches, manual transmission, automated transmissions, drive lines, differentials, and related components. Emphasis is on study of construction, operating principles, repairing, adjustments and transferring of power.

Credit: 3 hours — Two lecture and two lab hours per week.

AUT 114 Air Conditioning & Heating

This course is designed to train students on operating principles, testing, diagnosis, and servicing of automobile air conditioners, heaters, and controls. Basic testing equipment will be used to determine repairs needed.

Credit: 3 hours -- Two lecture and two lab hours per week.

AUT 115 Shop Safety

This course is designed to orient students to basic safety practices necessary with automotive equipment and to introduce the student to management, organization and operation of automotive business. Emphasis is placed on operating procedures, employee and labor relations, productivity, shop layout and planning, customer relations, record keeping, purchasing and basic principles of merchandising.

Credit: 1 hour — One lecture hour per week.

AUT 116 AC & DC Electrical Systems

A course dealing with the construction, operation, function, testing and repairing of the charging and ignition systems. Various electrical circuits such as the lighting and instrument circuits will also be studied. Students will be expected to perform selected tests using appropriate service manuals and test equipment.

Credit: 3 hours — Two lecture and two lab hours per week.

AUT 117 Brakes, Wheel Alignment, Balance and Suspensions

Study of manual and power brakes, suspension systems, front wheel alignment, dynamic and statis wheel balance and standard and power steering systems. Emphasis is placed on operating principles, troubleshooting and repairing using latest equipment available.

Credit: 3 hours — Two lecture and two lab hours per week.

AUT 118 Emission Control Systems

A course designed to give the student background in the design, operation and troubleshooting of emission control systems.

Credit: 2 hours — One lecture and two lab hours per week.

AUT 119 Fuel and Fuel Systems

A course designed to provide background in fuel systems and carburetors. Included is nomenclature, design, construction and maintenance of fuel tanks, fuel lines, fuel pumps, filtration systems and carburetors. Students will conduct inspection and rebuilding of various types of fuel pumps and carburetors.

Credit: 3 hours — Two lecture and two lab hours per week.

AUT 123 Manual & Automatic Transmissions

Study of various types of manual and automatic transmissions for the understanding of disassembly, assembly, function, construction, operation service and troubleshooting procedures.

Credit: 3 hours — Two lecture and two lab hours per week.

AUT124 Auto Shop Management

This course is designed to introduce the student to problems relating to management, organization and operation of an automotive shop. Credit: 2 hours — Two lecture hours per week.

AUT 126 Auto Blueprint Reading

This course is designed to familiarize the student with the symbols utilized in automotive blueprints. Upon successful completion of this course the student should be able to readily identify automotive components from blueprint diagrams.

Credit: 3 hours — Two lecture and two lab hours per week.

AUT 127 Internship

Course is designed to assist the student with the application of information and skills acquired in previous automotive courses.

Credit: 5 hours — One lecture and twenty lab hours per week.

DIESEL TECHNOLOGY

DIS 128 Diesel Engine Operation and Service

This course will acquaint the student with the operation and servicing of diesel engines. Students should have prior knowledge of how engines operate and knowledge of basic tools used in servicing. Students must have completed AUT 111 Multi-Cylinder Engines successfully before entering this course. Difference in construction between gasoline and diesel engines will be discussed in detail.

Credit: 4 hours — Two lecture and four lab hours per week.

Prerequisite: Multi-Cylinder Engines (AUT 111)

DIS 129 Diesel Fuel and Fuel Systems

The operation and diagnosis of various systems components for diesel engines will be presented in this course. Emphasis will be placed on identification, testing, repair and replacement of various fuel-injection pumps, fuel injectors, filters, and deliver systems.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

DIS 130 Diesel Engine Tune-Up and Diagnosis

Diagnosis and tune-up procedures of diesel engines using various testing equipment will be emphasized. Students must have a knowledge of diesel engines and diesel fuel systems by successfully completing DIS 128 - Diesel Engine Operations and Service and DIS 129 - Diesel Fuel and Fuel Systems prior to entering this course.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Diesel Engine Operation and Service and Diesel Fuel and Fuel Systems

ELECTRONICS

ELT 110 Basic Electrical Concepts

A study of the relationship between current voltage resistance and power for direct current and alternating current circuits. Topics included are: use of power sources and meters, component symbols and abbreviations, the electronic VOM, sources of electricity, the electronic power supply, switches and switching circuits, Ohm's Law, power-heat-light, series resistive circuits, series circuits — Kirchhoff's Law, parallel resistive circuits, parallel circuits — Kirchhoff's Law, series-parallel circuits, Thevenin's and Norton's Theorems, rheostats and potentiometers, voltage dividers, the DC voltmeter, the DC ammeter, the ohmmeter, power transfer, direct and alternating currents, the oscilloscope, the audio frequency generator, the function generator, relays, inductance, transformers, inductive reactance, capacitance, time constants, capacitive reactance, series resonance and parallel resonance.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: The student must be enrolled in or have completed Math 114 or Math 115 at the time of enrolling in this course.

ELT 111 Rotating Machinery I

A study of DC and AC machines. Topics included are: series and parallel equivalent resistances, resistances in parallel, resistances in series and in series-parallel, safety and the power supply, Ohm's Law, circuit solution, power in DC circuits, the transmission line, the

direct current motor, AC voltage and current measurement, the wattmeter, phase angle — real and apparent power, capacitive reactance, inductive reactance, watt— var, volt-ampere and power factor, vectors and phasors-series circuits, vectors and phasors-parallel circuits, impedance, the synchronous motor and the electrodynamometer, the DC shunt motor, the DC series motor, the DC compound motor, the DC separately excited shunt generator, the DC self excited shunt generator, the DC compound generator, the DC series generator, the split-phase induction motor, the capacitorstart motor, and the capacitor-run motor.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: The student must be enrolled in or have completed Math 114 or Math 115 at the time of enrolling in this course.

ELT 112 Basic Electronic Concepts I

An introduction to electronic concepts including the following topics: introduction to semiconductor diodes, rectifiers; half-wave and full-wave, filtering and voltage doublers, power supply test and checks, introduction to the transistor, transistor testing, transistor biasing, common base circuit, common emitter circuit, common collector circuit, bias stabilization, the transistor specification sheet, RC coupling, transformer coupling, direct coupling, single-ended power amplifier, phase splitter, phase inverter, push-pull power amplifier, complementary power amplifier, amplifier test and troubleshooting procedure, phase-shift audio oscillator, LC audio oscillator, the radio frequency generator, Hartley RF oscillator, and Colpitts RF oscillator.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Basic Electrical Concepts 110 and Rotating Machinery | 111

ELT 113 Rotating Machinery II

A continuation of Rotating Machinery I to include the following topics: the universal motor, the repulsion start-induction run motor, the single phase transformer, transformer phasing, transformer regulation, the autotransformer, transformers in parallel, distribution transformer, three phase circuits, three-phase — watts, vars and volt-amperes, three-phase power measurement, three-phase transformer connections, the wound rotor induction motor, the squirrel cage induction motor, the synchronous motor, the three-phase alternator, the alternator under load, alternator sychronization, alternator power, phase sequence, frequency conversion, reactance and frequency, three-phase to two-phase conversion, selsyn control, and SCR speed control.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Basic Electrical Concepts 110 and Rotating Machinery

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ELT 210 Electronic Concepts II

A continuation of the study of electronic concepts including the following topics: junction field effect transistor, JFET voltage amplifier, JFET constant current source, metal oxide semiconductor field effect transistor, MOSFET voltage amplifier, dual gate MOSFET, Zener diode, Zener diode voltage regulation, shunt type voltage regulator, series type voltage regulator, DC to DC converter, series feedback, shunt feedback, multistage amplifier feedback, Darlington pair, differential amplifier, integrated circuit operational amplifier, IC OP AMP — inverting amplifier, IC OP AMP — non-inverting amplifier, IC OP AMP, summing amplifier, IC OP AMP, voltage comparator, IC OP AMP, active filter, unijunction transistor, UJT waveform generator, programmable UJT, and put frequency divider circuit.

Credit: 3 hours — Two lecture and two lab hours per week,

Prerequisite: Basic Electronic Concepts I 112 and Rotating

Machinery II 113

ELT 211 Electric Power Transmission

A study of electric power transmission systems to include the following topics: safety and the power supply, phase sequence, real power and reactive power, power flow and voltage regulation of a simple transmission line, phase angle and voltage drop between sender and receiver, parameters which affect real and reactive power flow, parallel lines — transformers and power-handling capacity, the alternator, the synchronous motor, the synchronous condenser and long high voltage lines, transmission line networks and the buck-boost, phase shift transformer, the synchronous motor under load, hunting and system oscillation, power system transients and additional experiments.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Basic Electronic Concepts I 112 and Rotating Machinery II 113

ELT 212 Digital Electronics I

An introduction to digital electronics to include the following topics: digital logic trainer familiarization, and/or logic gates; not circuit, NAND/NOR logic gates, dual gating functions — symbolic notation and practical gate applications, number systems; binary numbers and encoders, the decoder, exclusive-OR/NOR gates; parity cir-

cuits, memory circuits — the R-S flip-flop, type-T and type-D flip-flops, J-K flip-flop, ripple counter, programming a ripple counter, the BCD decade counter, parallel (synchronous) counters, controlling the modulus of synchronous counters, and the variable modulus synchronous counter.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Basic Electronic Concepts I 112 and Rotating Machinery II 113

ELT 213 Industrial Circuits and Controls I

A study of industrial circuits and controls including the following topics: continuity tests — buzzer and lamp, two-station and three-station control, control diagrams — schematic and connection, electromagnetic contractors and relays, full-voltage control of a 30 induction motor, delayed start of a 30 induction motor, start-stop-jog of a 30 induction motor, definite-time jogging and the magnetic brake, forward-reverse control of a 30 induction motor, primary-resistor starting of a 30 induction motor, autotransformer starting of a 30 induction motor, unbalanced starting of a 30 induction motor, starting a 30 wound-rotor induction motor, cam-switch and drum-switch controls, and plugging of 30 induction motors.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Basic Electronic Concepts I and Rotating Machinery II 11

ELT 214 Electronic Concepts III

A continuation of the study of electronic concepts to include the following topics: silicon controlled rectifier. characteristics, SCR DC power control, SCR AC power control, UJT-SCR time delay circuit, triac and diac, triac — diac AC power control, thermocouple - OP AMP temperature control, thermistor temperature control, photoconductive cells, photo-conductive cell - light control, photovoltaic cells, photovoltaic cell - OP AMP light control, photovoltaic cell - light measurement, waveshaping circuits — Differentiation, wave-shaping circuits — integration, diode limiters and clamps. Schmitt trigger. monostable multivibrator, bistable multivibrator, astable multivibrator, blocking oscillator, bootstrap sawtooth generator, IC timing circuit, light emitting diode, diode digital logic gates, transistor digital logic gates, integrated digital logic gates, JK flip-flop, four bit binary counter. decade counter, and introduction to pulse modulation.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Electronic Concepts II 210

ELT 215 Digital Electronics II

A continuation of the study of digital electronics to include the following topics: registers, parallel-to-serial and serial-to-parallel conversion, synchronous and asynchronous data transmission, shift right/left register, complementing shift register, ring counter and twisted-ring counter, binary addition, binary subtraction, the binary adder-subtractor, Boolean algebra, simulating problems with logic circuits, circuit simplification; the Karnaugh map, sequential control circuits, and shift register generator.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Digital Electronics I 212

ELT 216 Industrial Circuits and Controls II

A continuation of the study of inductrial circuits and controls to include the following topics: direct-current contractors and relays, direct-current time-delay relays, cam-switch control of a DC motor, CEMF starting of a DC motor, definite-time DC motor starter, plugging of a DC motor, cam-switch "hoist-lower" control of a DC motor, magnetic "hoist-lower" control of a DC motor, DC braking of a 30 motor, 30 synchronous motor — definite-time starter, 30 synchronous motor — automatic synchronization, 30 synchronous motor — complete control system, sequence timer, and starting split-phase and capacitor-start motors.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Industrial Circuits and Controls I 213

ELT 217 Radio Communications

This is an optional course which could be used as a program elective for students desiring additional background in the radio communications area. Topics included are: demodulation, audio preamplifier — driver and output stages, superheterodyne second if amplifier stage, superheterodyne first if amplifier stage, superheterodyne detector and AVC stage, superheterodyne RF tuning circuit, superheterodyne local oscillator circuit, superheterodyne converter stage, superheterodyne receiver alignment, superheterodyne troubleshooting, introduction to FM, communications principles and service considerations, integrated circuit audio amplifier, crystal oscillator, passive filters and impedance matching circuits, RF amplifier, amplitude modulation, transmitting antenna, varactor diode, beat frequency principles, frequency modulation principles, FM detection principles, and automatic frequency control principles.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Basic Electronic Concepts I 112

ELT 218 F.C.C. License Preparation

Intensive study on rules, regulations, and exam related theory is included. F.C.C. rules and regulations related to two-way communications is also studied. The laboratory time is spent studying advanced communication circuitry. The main objective is to enable the student to pass the F.C.C. Second Class exam.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Electronic Concepts II 210

FOOD SERVICE

FOS 110 Introduction to Food Services

An introductory course in food services designed to give the student a view of the total food service program. This course provides necessary introductory information needed for the beginning student.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

FOS 111 Food Service Sanitation and Safety

A study of personal hygiene and the principles involved in maintaining sanitary standards necessary to comply with regular agencies for a food service operation.

Credit: 2 hours — Two lecture hours per week.

Prerequisite: None

FOS 112 Introduction to Food Preparation

Food preparation by the use of recipes, weights, and measures are discussed. Various chemical analyses conducted on food products and water supplies to control product quality is also discussed.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

FOS 113 Meat Cutting & Processing

A course dealing with the principles pertaining to cutting and processing beef, pork, lamb, and fish. Institutional bulk cut and prime table cuts suitable for locker plant retail shop training are emphasized.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

FOS 114 Introduction to Baking

Course designed to familiarize the student with the basic techniques of baking bread, sweets, and meats.

Credit: 2 hours — One lecture and two lab hours per week.

FOS 115 Food Plant Equipment

A survey course designed to introduce the student to various types of food preparation equipment, equipment operation and effectiveness.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: None

FOS 117 Fish, Eggs, and Poultry Cookery

A cooking course designed to increase the student's knowledge and skill in the preparation and grading of fish, eggs, and poultry.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

FOS 123 Cooking Technology

A study of the fundamental principles of cooking as a means of food processing. The laboratory introduces the student to the actual preparation of both mass and small portions, including preparation of salads and decorative cooking.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

FOS 124 Baking

A more advanced course than FOS 114. The student is given practical shop exposure to training in bread and sweet doughs and pastry cooking. Exposure to palatability, kind, quality and proportion of ingredients is given.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Introduction to Baking 114

FOS 125 Nutrition

A study of the processes by which living things consume food and utilize its nutrients. Concentration is placed on the five major nutrients (Proteins, Carbohydrates, Fats, Vitamins, and Minerals).

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

FOS 126 Food Services Internship

The student is given an opportunity to work in a food service facility and with an opportunity to utilize the previous training in food service.

Credit: 5 hours — One lecture and twenty lab hours per week.

Prerequisite: Completion of at least 28 hours in the Food Service Program.

COSMETOLOGY

COS 110 Cosmetology Theory

A study and practice of professional ethics, personal hygiene, grooming, visual poise, personality development, bacteriology, sterilization, sanitation, the skin, scalp, tricology, nails, and disorders of the skin and scalp.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

COS 111 Cosmetology Theory

This course will include the theory of electricity and light therapy, chemistry as applied to cosmetology, chemistry of cosmetics, anatomy, histology and physiology.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Cosmetology 110

COS 112 Cosmetology Theory

This course will include the mathematics of cosmetology, a study of the practical application of salon management, Illinois Law as defined by the Illinois Department of Rules and Regulations and a review of the entire curriculum in preparation for the Illinois State Board Examination.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Cosmetology 111

COS 113 Cosmetology Laboratory

There will be demonstrations and lectures by the instructor with the student participating in the following: shampooing and rinsing, scalp treatments, hair shaping, roller placement, pin curls, hair styling, permanent waving, hair straightening, hair coloring (all types), manicuring, facial massage, facial make-up, eyebrow arching, superflous hair removal, hair pressing, thermal waving, wig care and styling. Students will perform these duties on each other until 160 clock hours have been obtained, then they will be allowed to work with patrons.

Credit: 9 hours — 27 lab hours per week.

Prerequisite: None

COS 114 Cosmetology Laboratory

This will be a review of the skills taught in Cosmetology 113 with lectures and demonstrations by the instructors. Also covered will be balance and design for hair styling, trend hair styling, fashion trend make-up (daytime and evening). The students will perform these services on each other, mannequins and patrons of the school.

Credit: 9 hours - 27 lab hours per week.

Prerequisite: Cosmetology 113

COS 115 Cosmetology Laboratory

A complete review of Cosmetology 112 and 113 in preparation for the State Board Examination. Also, included will be demonstrations by instructors, public clinics conducted by students, and sanitation duties performed by students in accordance with the Department of Registration and Education, State of Illinois.

Credit: 9 hours — 27 hours per week.

Prerequisite: Cosmetology 114

COS 210 Cosmetology Instructor Training

This course stresses basic cosmetology instructional techniques. The student will observe and assist with instruction under the direct supervision of a qualified cosmetology instructor. Both theory and practical courses will be emphasized. Students who are graduates of an approved school of beauty culture and have one year of experience as a registered beauty culturist may proficiency Cosmetology 210 and enroll directly in Cosmetology 211 to qualify for the State Licensing Examination by the Illinois Department of Registration.

Credit: 12 hours — Five lecture and thirty-five lab hours per week.

COS 211 Cosmetology Instructor Training

This course is a continuation of Cosmetology 210. More emphasis is placed on the supervision and instruction in the classroom and laboratory setting. Preparation of lesson plans and actual classroom instructional presentations by the student will be emphasized. Additional theory instruction in educational psychology, basic principles of student teaching, and business experience will be stressed.

Credit: 12 hours — Five lecture and thirty-five lab hours per week.

GENERAL STUDIES

CPR 200 Cardiopulmonary Resuscitation I

The purpose of this course is to train persons in the techniques of administering cardiopulmonary resuscitation.

Credit: 1 hour — One lecture hour per week.

Prerequisite: None

CPR 201 Cardiopulmonary Resuscitation II

The purpose of this course is to train persons to become instructors to teach others the techniques for cardiopulmonary resuscitation.

Credit: 1 hour — One lecture hour per week.

DPB 111 Total Communication for Hearing Impaired

This course is for all interested parents, friends, associates, and professional people of the deaf and hard of hearing. It will cover the history, philosophy, and understanding of deafness and its implications. Brief history of manual communication of the deaf in the United States and other countries will be covered. Practice in learning to sign and fingerspell will also be given. Emphasis will be placed on reading fingerspelling and sign language.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

DPB 112 Total Communication for the Hearing Impaired II

Review of sign language and fingerspelling learned in Total Communication I. Practice in learning to sign and fingerspell on the second level. Emphasis will be in reading fingerspelling.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: DPB 111

DPB 113 Total Communication for the Hearing Impaired III

Review of sign language and fingerspelling learned in Total Communication II. Practice in learning to sign and fingerspell on a conversational level. Emphasis in developing expressive and receptive skills.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: DPB 112

DRV 100 Principles of Bank Operations

This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may view his chosen profession in a broad (and Operational) perspective. The descriptive orientation is intentional. Banking is increasingly dependent upon personnel who have the broad perso necessary for career advancement.

Credit: 3 hours — Three lecture hours per week.

DRV 101 Installment Credit

In this course, the techniques of installment lending are presented concisely. Emphasis is placed on establishing the credit, obtaining and checking information, servicing the loan, and collecting the amounts due. Each phase of a bank's installment credit operation should be carefully scrutinized to be certain that the most efficient methods are employed, for only through an efficient operation can a bank maximize its profits on this particular kind of credit. Other topics discussed are inventory financing, special loan programs,

business development and advertising, and the public relations aspect of installment lending.

Credit: 3 hours — Three lecture hours per week.

DRV 102 Money and Banking

This course stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by the banking student to apply knowledge on the job. Historical treatment is kept to a minimum. Emphasis is also placed on such problems as economic stabilization, types of spending, the role of gold, limitations of central bank operations, governance of fiscal policies, balance of payments and foreign exchange showing their repercussions on the banking industry in affecting yield curve and structuring of portfolios.

Credit: 3 hours — Three lecture hours per week.

DRV 103 Law and Banking

An introduction to basic American law, presenting the rules of law which underlie banking topics including jurisprudence, the court systems and civil procedures, contracts, quasi-contracts, property, torts and crimes, agencies, partnerships, corporations, sales of personal property, commercial paper, bank deposits and collections, documents of title, and secured transactions. Emphasis is on the Uniform Commercial Code.

Credit: 3 hours — Three lecture hours per week.

EMT 101 Emergency Medical Technician Refresher

This course is basically a refresher course for qualified EMT's who must update their training every four years. Subsequently, this course involves work in essentially the material as presented in MET I.

Credit: 4 hours— Three lecture and two lab hours per week.

Prerequisite: MET | 100

ERT 100 Emergency Rescue Technician

This course is designed to acquaint students who have an interest in emergency services with the correct extrication procedures, phases of extrication and the hazards of extrication. Emphasis is placed upon the correct usage of vehicle extrication tools to free entrapped persons from wreckage.

Credit: 4 hours — Three lecture and two lab hours per week.

Prerequisite: Experience within the allied health field with rescue, fire supression or emergency medical health care technician or satisfactory completion of MET 100.

FA 040 Acrylic Painting

This course is designed to explore the many uses and advantages of using acrylic paint as a painting media. The use of acrylic paints will provide students with a completed painting in a matter of hours as opposed to days when using oil paint.

Credit: 2 hours Prerequisite: None

FA 044 Watercolor

This course is designed for those adults who have had little or no previous experience in elementary watercolor painting. Still life painting will include drawing, composition, and color.

Credit: 2 hours — One lecture and two lab hours per week.

FA 045 Oil Painting

Basic introduction to oil painting techniques. Adults who have had little or no experience are encouraged to enroll in Watercolor before entering the Oil Painting program.

Credit: 2 hours — One lecture and two lab hours per week.

FA 046 Ceramics

A beginning course for those who want to learn to decorate and work with various types of ceramics. In this course you will learn how to pour and clean ceramics as well as glazing.

Credit: 2 hours — One lecture and two lab hours per week.

FA 047 Intermediate Ceramics

This course is a continuation of the Ceramics 046 course. Greater emphasis shall be placed upon selection and use of appropriate materials.

Credit: 2 hours

Prerequisite: Ceramics 046

FA 048 Advanced Ceramics

This course is a continuation of Intermediate Ceramics 047. Considerable emphasis shall be placed upon proper use of materials, selection of materials, purchasing materials and storage of unfinished and finished products, how and when to fire the kiln.

Credit: 2 hours

Prerequisite: Intermediate Ceramics 047

FA 049 Antiquing

This course is designed for the beginner. Course instruction shall include how to condition raw wood, repair wooden surfaces, sand-paper surfaces and fill minor cracks with a minimum of effort.

Course will also place significant emphasis on how to successfully market antiques.

Credit: 2 hours Prerequisite: None

FA 050 Glass Staining

This is a basic course for the beginner in glass staining. The course will cover in detail all glass staining related factors from the initial involvement to how to price your work.

Credit: 2 hours Prerequisite: None

FA 051 Candlemaking

This course is designed to instruct the beginning student in the craft of making candles.

Credit: 2 hours Prerequisite: None

FA 090 Beginning China Painting

This course is a beginning in the knowledge of china painting. Emphasis shall be placed on the selection of materials, proper care of the materials, correct use of the materials, a basic knowledge of art, and how to fire the kiln.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: None

FA 091 Intermediate China Painting

This course is a continuation of Beginning China Painting 090. Considerable emphasis shall be placed upon making the student more aware of and greater appreciation for the world around him/her. Basic sketching will be reviewed at this time. A deeper study of color harmony and how china paint differs from other forms of color will be presented to the student.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: FA 090

FA 092 Advanced China Painting

This course is a continuation of Intermediate China Painting 091. Greater emphasis shall be placed upon experimentation of various mediums. Firing at different temperatures for different effects, drawing, color and color combinations. This class will work with gold and the different types of gold available for china work. Marketing and promotion of the finished products will be incorporated into the course.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: FA 091

FF 101 Fish Farming I

This course is designed to familiarize students with the basic practices of raising fish in ponds, cages, raceways, and/or tanks. Emphasis shall be given to producing fish for profit either as a small venture or a large scale vocation.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

FF 102 Fish Farming II

This course is a continuation of the Fish Farming I 101 course. Advanced practices and procedures will primarily be covered in this course. Greater emphasis will be placed on the establishment of a business and marketing factors.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: FF 101

FM 100 Financial Management for Small Municipalities

This course is designed to acquaint the student with the basic functions and requirements of efficient and effective financial management for small municipalities. Such topics as budget, auditing, reporting, purchasing, bookkeeping techniques, fund accounting, grant writing and grant sources will be covered.

Credit: 2 hours — Two lecture hours per week.

Prerequisite: None

FOS 127 Food Service Sanitation

This course is designed to provide the supervisor with the knowledge and methods necessary to teach sanitation to food service employees. The course also fulfills the requirements for mandatory training and certification required by the Illinois Department of Public Health.

Credit: 2 hours — Two lecture hours per week.

Prerequisite: None

FS 110 Orientation to Fire Fighting

The purpose of this course is to introduce the recruit fire fighter to the fire science program. The course will include topics as follows: orientation, fire behavior, extinguishers and extinguishing agents, communications, fire prevention and inspection, apparatus familiarization and physical fitness.

Credit: 3 hours — Two lecture and two lab hours per week.

FS 111 Fire Fighting Equipment & Methods

This course is designed to provide the students with basic knowledge of fire fighting equipment and procedures for using equipment. The course will include instruction related to small tools and equipment, ground ladders, ropes and knots, forcible entry, rescue, and physical fitness.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

FS 112 Fire Fighting Operations

This course will provide the student with training in the operation of a fire fighting unit. Fire suppression, hoses, fire streams and water supplies will also be included.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

FS 113 Fire Fighting Safety

The purpose of this course is to provide the recruit with basic knowledge of such fire fighting safety topics as breathing, equipment, ventilation, first aid, personal safety and hazards, salvage and overhaul, arson evidence, installed fire protection and fire systems and physical fitness.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

GED 010 Basic Communication

Review of basic English and communication skills in preparation for the GED test. This course may be taken for credit twice if necessary to prepare the student for the GED test.

Credit: 1 or 2 hours — One lecture hour per week.

GED 011 Basic Mathematics

Review of basic concepts of arithmetic, some attention to algebraic and geometric concepts in preparation for the GED test. This course may be taken for credit twice if necessary to prepare the student for the GED test.

Credit: 1 or 2 hours — One lecture hour per week.

GED 012 Basic Social Science

Review of basic Social Sciences including Civics, Economics, and History in preparation for the GED test. This course may be taken for credit twice if necessary to prepare the student for the GED test.

Credit: 1 or 2 hours — One lecture hour per week.

GED 013 Basic Science

Review of basic concepts of science, with consideration of general principles, biology, chemistry, and physics in preparation for the GED test. This course may be taken for credit twice if necessary to prepare the student for the GED test.

Credit: 1 or 2 hours — One lecture hour per week.

GR 100 Grantsmanship

This is a course designed for the average inexperienced person who has an interest in developing the necessary grantsman's skills and determining the essential tools for grants procurement.

Credit: 2 hours Prerequisite: None

HME 090 Beginning Sewing

Basic dressmaking techniques of clothing construction will be presented in this course. The Bishop method with variations is presented, and these principles are used to construct an attractive well fitted garment by each class member. This is a course for the beginner who knows how to use the sewing machine, but wants to learn construction techniques that will produce quality looking garments.

Credit: 2 hours — One lecture and two lab hours per week.

HME 091 Advance Sewing

This course will be a continuation of Clothing Construction I. The student will learn to solve figure problems and to construct a basic dress from which all later measurements can be taken to make properly fitted clothing. Upon completion of the basic dress the student will make a garment using the finer dress making points.

Credit: 2 hours — One lecture and two lab hours per week.

HME 092 Pattern Fitting

This course consists of basic tissue pattern, developing an understanding of grain line of fabric and its interpretation into the pattern by draping and drafting fabric. The course will place emphasis upon solving pattern problems by manipulation of miniature patterns and refining the patterns.

Credit: 2 hours — One lecture and two lab hours per week.

HME 093 Beginning Tailoring

A basic course which is designed to provide the student with the essential elements of making men and women's clothing. The course is based upon the following three primary concepts: (1)

Building a permanent shape into a garment, (2) Specific emphasis placed upon grading of seams, clipping, notching, and layering of fabrics and (3) Basic pressing techniques, pounding, fusing, understitching by hand or machine and top stitching.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: Beginning and advanced sewing

HME 094 Advanced Tailoring

This course is designed as a follow-up to Beginning Tailoring. Emphasis will be placed upon applying the basic techniques of the previous course through the use of more individual creativity.

Credit: 2 hours — One lecture and two lab hours per week.

Prerequisite: Beginning Tailoring 093

HOM 096 Interior Decoration

Fundamentals of interior decoration, harmony of color and fabric, helpful hints on decoration on a low budget.

Credit: 2 hours — One lecture and two lab hours per week.

HOM 097 Advanced Interior Decoration

This course is a continuation of beginning Interior Decoration 096. Specific emphasis will be placed upon saving while improving the home surroundings in a very inexpensive manner.

Credit: 2 hours — One lecture and two lab hours per week.

HOM 098 Home Design

This course is designed for the purpose of viewing home design from the various perspectives which essentially determines how and why houses are constructed in a variety of forms.

Prerequisite: 2 hours — One lecture and two lab hours per week.

HOM 100 Creative Stitchery

The fundamental techniques of knitting, crocheting, crewel embroidery and needlepoint are included in this course.

Credit: 2 hours — One lecture and two lab hours per week.

HOM 101 Quiltmaking

This course is designed to cover the fundamentals of quilting techniques to produce marketable, creative articles.

Credit: 2 hours — One lecture and two lab hours per week.

HOM 062 Furniture Upholstering

You can make your old furniture more beautiful and usable. Instruction, demonstration and individual help in repairing your furniture, tying springs, cording, upholstering, and covering. Limited storage

space is available.

Credit: 2 hours — One lecture and two lab hours per week.

HOM 063 Furniture Refinishing

The stripping and refinishing of old pieces of furniture. You will be able to share ideas with one another plus receive assistance from the instructor. Hand chair caning will also be offered during this class for those wishing to learn the art. Limited storage space is available.

Credit: 2 hours — One lecture and two lab hours per week.

HOM 064 Intermediate Furniture Upholstery

This course is a continuation of Furniture Upholstery 062. Due to the extensive amount of material and work to be covered in the first course, it is recommended that all students continue with the second course to adequately learn all of the techniques for upholstering furniture.

Credit: 2 hours

Prerequisite: Furniture Upholstery 062

HOM 065 Intermediate Furniture Refinishing

This course is a continuation of the first refinishing course. This course is designed for the student interested in learning about the advanced techniques in refinishing.

Credit: 2 hours

Prerequisite: Furniture Refinishing 063.

HOM 066 Advanced Furniture Upholstery

This course is a continuation of the first two courses. Due to the extensive amount of material and work to be covered in the first two courses, it is recommended that all students continue with the third course to adequately learn all of the techniques and finalize their work. Additional information concerning how to set up an upholstery business will be provided in this course.

Credit: 2 hours

Prerequisite: Intermediate Furniture Upholstery 064

HOM 102 Intermediate Creative Stitchery

This course is a continuation of the first creative stitchery. This course will add the dimensions of marketing and how to wisely choose materials.

Credit: 2 hours

Prerequisite: Creative Stitchery 100

HOM 103 Advanced Creative Stitchery

This course is a continuation of the first two courses in creative stitchery. Greater emphasis will be placed upon intricate designs. A

selling display will be held at the end of this course.

Credit: 2 hours

Prerequisite: Intermediate Creative Stitchery 102

ICT 100 Personal Income Tax

This course is designed to assist students in preparing and filing their personal income tax.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

ICT 102 Small Business Tax

This course is specifically designed to assist those persons involved in small business income tax preparation.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

ICT 103 Farm Tax

This course is specifically designed to assist farmers in income tax preparation.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

MAT 120 Metric Math

This course consists of the basic elements of the metric system; it is primarily designed for the purpose of assisting the general public in the conversion process which will occur in the United States.

Credit: 1 hour — Two lab hours per week.

MPD 100 Master Pastry Designing

This is an introductory course to the art of pastry design which provides individualized instruction for beginners. It provides instruction in everything from how to bake and prepare the pastries and how to design beautiful all occasion pastries.

Credit: 2 hours — One lecture and two lab hour per week.

Prerequisite: None

PD 101 Introduction to Emotional Self-Help

This course is designed to assist students in developing the ability to understand rational counseling and how this concept can be applied in their daily activities.

Credit: 2 hours — Two lecture hours per week.

Prerequisite: None

PET 100 Parent Effectiveness Training

This course is a basic training class for parents and interested individuals. Emphasis shall be placed upon teaching the basic skills needed to assist in raising responsible children. Credit: 2 hours — Two lecture hours per week.

PET 101 Parents-Special Needs Children

This course is designed to assist parents on how to work effectively with the physically and/or mentally handicapped children. The course will also acquaint parents with the services in their community that they can rely on for the additional help that they will need.

Credit: 3 hours
Prerequisite: None

PN 139 First Responder

This course is designed to assist in the improvement of emergency medical care rendered to victims of accidents and illness. Primary emphasis of this course is to provide students with training in emergency medical care with specific emphasis upon what to do if you are the first to reach an accident.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

REP 111 Introduction to Real Estate Sales

This course is designed to introduce the student to such real estate fundamentals as: ownership, principles and concepts of property ownership, various types of real estate opportunities, real estate marketing, financing, leasing, taxation, appraisal, development, insurance, and state licensing. This course would be appropriate for persons seeking to prepare for the Illinois License Examination for real estate salesman.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: None

REP 112 Intermediate Real Estate Practices

This course is designed to cover the real estate functions of securing and servicing listings, qualifying buyers and sellers, multiple listing services, showing property, advertising, and real estate sales techniques.

Additional topics covered will include information on financing, mortgages, deeds, foreclosure, insurances of mortgages and principles of property value for mortgage credit. Topics in real property insurance such as risk, nature and function of insurance, types of insurance, bonding the broker, etc., will also be covered.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Introduction to Real Estate Sales 111 or a valid real estate salesman license.

REP 113 Advanced Real Estate Practices

This course is designed to cover the obligations and effects of legal documents in listing, selling, conveying, leasing, and financing real estate. Emphasis will be placed upon the various legal documents used in real estate transactions. Other appropriate topics will be covered to inform the student of the nature and functions of the real estate brokerage. Such topics as qualifications of the real estate broker, principles of land utilization, appraisal principles and methods, basic policies, organization and equipment of the broker's office, office personnel, selection of sales persons, compensation of sales persons, types and sources of listings, control of listing, control of prospects, real estate markets, financing control and government regulations will be covered.

Credit: 3 hours — Three lecture hours per week.

Prerequisite: Introduction to Real Estate Sales 111 or a valid real estate salesman license.

SC 101 Introduction to Senior Legal Rights

The purpose of this course is to introduce senior citizens to the various legal avenues for obtaining:

- Adequate income
- 2. Suitable housing
- 3. Opportunities for employment without discrimination
- 4. Pursuit of meaningful activity
- 5. Immediate benefit from proven research knowledge
- 6. Best possible physical and mental health

Credit: 2 hours — Two lecture hours per week.

SC 102 Senior Legal Rights

This course is a continuation of the introductory course. The second semester will be concerned with physical and mental health; restorative services; retirement in health, honor, and dignity; needed and available community services; and freedom, independence, and the free exercise of individual initiative.

Credit: 2 hours — Two lecture and two lab hours per week.

Prerequisite: SC 101

HORTICULTURE TECHNOLOGY

OHT 111 Introduction to Horticulture

A comprehensive study of the plants utilized in horticultural practices. Presentation of the techniques and procedures utilized to propagate, produce, and maintain these plants.

Credit: 5 hours — Three lecture and four lab hours per week.

OHT 112 Introduction to Greenhouse Operation

An introduction to the basic types of greenhouses and their utility and adaptation for the culture and propagation of plants. The general techniques for culturing and propagating plants in the greenhouse will be presented.

Credit: 3 hours — Two lecture and two lab hours per week.

OHT 113 Landscape Design

A study of the theory and concepts of landscape design applied to private and public areas. In the laboratory, preliminary sketches and final plans of a landscape layout will be prepared.

Credit: 3 hours — Two lecture and two lab hours per week.

OHT 125 Turfgrass Culture

A study of the prominent lawn and special purpose grasses, including methods of identification, propagation, and maintenance. Also an introduction to the common weeds which infect turf and the utilization of herbicides.

Credit: 4 hours — Two lecture and four lab hours per week.

OHT 127 Nursery Operations

An introduction to the techniques and procedures utilized in the commercial production of annuals, herbaceous perennials, decidous shrubs and trees, and conifers. Nursery practices of propagation and maintenance will be emphasized.

Credit: 4 hours — Two lecture and four lab hours per week.

OHT 128 Insect Pest and Plant Disease

Study of the insect pests and plant disease of ornamental plants. Introduction to the safe and regulated utilization of insecticides and fungicides.

Credit: 3 hours — Two lecture and two lab hours per week.

OHT 130 Greenhouse Management

A study of the various culture techniques utilized for the commercial production of plants. Various other greenhouse management problems will be stressed.

Credit: 3 hours — Two lecture and two lab hours per week.

OHT 131 Horticulture Business Management

A course utilizing and extending information and horticultural techniques for the proper management of a commercial operation.

Credit: 3 hours — Two lecture and two lab hours per week.

OHT 132 Horticulture Internship

A course designed to place the student in a practical work situation which is closely related to the area of emphasis of the student's program,

Credit: 5 hours — One lecture and twenty lab hours per week.

LAW ENFORCEMENT

CLE 103 Introduction to Crime Control

Review of the historical and idealogical foundations of law enforcement and corrections; delineation of major patterns of practice and organizational structure; and description of major programs and their inter-relationships.

Credit: 3 hours — Three lecture hours per week.

CLE 105 Criminal Behavior

Introduction to personality theories and their application to causes of crime with primary emphasis on individual-oriented theories; consideration of the offender and his community context as problems for rehabilitation efforts; criticism of typical treatment programs.

Credit: 3 hours — Three lecture hours per week.

CLE 115 Interpersonal Relations

Delineation of the major patterns characteristic of relationships between pre-delinquents or offenders and staff of community-based programs; analysis of means of encouraging the development of internalized controls by offenders within the relatively free environment of the average community. Analysis of the fundamental problems of police relationships when situations call for persuasive techniques; discussion of principles pertinent to motivating law observance without coercion; study of the techniques of subject interrogation, consideration of creating favorable public image of policemen.

Credit: 3 hours — Three lecture hours per week.

CLE 209 Criminal Law

Consideration of legal aspects of law enforcement. Laws of arrest, search and seizure and constitutional due process, entrapment and informers, wire tapping, interrogation, evidence, examination of court procedures with special implications for criminal justice professionals.

Credit: 3 hours — Three lecture hours per week.

MACHINE TOOL OPERATION

MAC 116 Machine Tool Fundamentals

In this course the trainee studies measuring instruments, gauges, and the theory of metal cutting. This course includes machine shop experience on use and care of hand tools, taps and tapping methods, allowances and tolerances for standard fits and thread fits, the drill press, power saw, band saw, engine lathe, milling machines, turrent lathe, grinders, cutting fluids, and surface finish.

Credit: 3 hours — Two lecture and two lab hours per week.

MAC 117 Lathe Operations I

This is a lecture, laboratory course designed to acquaint the student with the safe operation of the engine lathe. He should develop proficiency in learning the major parts of the lathe, proper setup, basic tool grinding, facing, center drilling, straight turning between centers, and threading.

He should develop skill proficiency in determining feeds, speeds and proper tool selection in machining various types of materials.

Credit: 3 hours — One lecture and four lab hours per week.

MAC 118 Lathe Operations II

This course will prepare a person for employment as a lathe operator in a production or job shop. After completion of Lathe Operations I, he will develop proficiency in the safe operation of the engine lathe, turrent lathe and trach lathe. Such operations as drilling, reaming, threading and the use of the attachments, fixtures and special purpose tooling will be emphasized.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Lathe Operations I 117

MAC 119 Milling Machine Operations I

This is a lecture, laboratory course designed to acquaint the student with the major parts of the milling machine and its accessories. The student will be expected to develop skill proficiency in the safe operation and setup, learn to calculate proper feeds and speeds for machining various types of materials.

Credit: 3 hours — Two lecture and two lab hours per week.

MAC 120 Milling Machine Operations II

This is a lecture, laboratory course designed to prepare the student for entry level employment as a milling machine operator in a production or job machine shop. After completion of milling Machine 1, he will develop skill in the safe operation of the universal horizontal column, and ram type of vertical milling machine including the use of all available attachments, fixtures, and special purpose tooling. Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Milling Machines Operations I 119

MAC 121 Drill Press Operator

This course is designed to prepare a person for employment as a drill press operator in a production or job shop. He is expected to develop skill proficiency in proper tool selection, feeds and speeds, in machining various types of materials, nomenclature of the drill press, drill grinding, setup and and safe operation of the drill press. Credit: 3 hours — One lecture and four lab hours per week.

MAC 122 Machine Shop

This course is designed to give students experience in work layout and tool selection and will develop proficiency in the setup and operation of the drill press, power saw, milling machine, surface grinder and engine lathe.

Credit: 3 hours — One lecture and four lab hours per week.

MAC 123 Metallurgy and Heat Treatment

This is a lecture-lab course on the fundamental characteristics and properties of industrial metals including machinability, bonding, and heat treatment. This course surveys the classification of modern industrial metals worked in modern machine shops. It points out the property differences between non-ferrous metals, ferrous metals, high temperature metals, rare metals, and how property differences affect machinability, malleability, brittleness, elasticity and hardness. The course surveys heat treating techniques involving controlled heating and cooling industrial metals. Through this lecture-lab course the student will understand the limitation of the material involved in machine shop work. He will have some degree of insight regarding the metallurgical processes involved. Parts produced in a machine shop require heat treatment and it is important for a machinist to be familiar with the science of heat-treating metals.

Credit: 3 hours — Two lecture and two lab hours per week.

TEACHER AID

TEA 121 Introduction to Teacher Aide Duties

This course examines the role of the trained teacher aide at all levels of work in various areas of the curriculum. An in-depth study will be made of the duties, responsibilities and ethical principles of the teacher aide. A consideration of the future of the role of personnel in such positions will be made.

Credit: 3 hours — Three lecture hours per week.

TEA 122 Teaching Materials and Their Use

Operations of audiovisual equipment, organization of materials and books, preparation of audiovisual aids such as bulletin boards, mounting pictures, lettering etc. will be stressed.

Credit: 3 hours — Two lecture and two lab hours per week.

TEA 123 School Procedures

This course will deal with the school as a complex public owned institution, stressing the role of staff in helping to transmit a positive impression in a truthful and tactful manner. The importance of school forms, record keeping and work organization will be included, along with utilization of community resources.

Credit: 3 hours — Three lecture hours per week.

TEA 225 Practicum

This will be a supervised teacher aide experience program. Supervising personnel will be fully certified teachers in the public or private school system.

Credit: 5 hours — One lecture and 20 lab hours per week.

TEA 124 The Young Child's Development

This course is planned to provide the child care giver with an understanding of the total development of the young child. It focuses on the physical, intellectual, emotional and social aspects of the preschool child's development. Such an approach will benefit the day care worker, nursery school personnel, and licensed sitters, as well as parents.

Credit: 2 hours — Two lecture and two lab hours per week.

Prerequisite: None

TEA 125 Managing the Preschool Classroom

This course is planned to provide the child care giver with realistic approaches toward setting up the physical environment for a preschool or day care center. It will deal with the selection and use of equipment, define interest areas and consider safety and health in the center. Group management will be covered in terms of scheduling, transition periods and discipline.

Credit: 2 hours — Two lecture and two lab hours per week.

Prerequisite: None

TEA 126 Curriculum for Preschool Programs

This course will provide the child care giver with a wide range of curriculum possibilities that can add quality and enrichment to early childhood programs. It will encourage play and discovery techniques and will include theoretical and practical approaches toward developing language, cognitive, physical and creative skills in the young child.

Credit: 2 hours — Two lecture and two lab hours per week.

Prerequisite: None

TEA 127 Early Childhood Model Programs

This course will survey contemporary models of early childhood programs focusing on the theory supporting each program, and the goals and methods involved in each. It is designed to offer the student a broad understanding of alternate approaches to early childhood education and to equip the student with the ability to analyze approaches critically.

Credit: 2 hours — Two lecture and two lab hours per week.

Prerequisite: None

WATER TREATMENT

WWT 110 Introduction to Water and Wastewater Technology

A course introducing the fundamental principles of hygienic sewage disposal and water source development and protection emphasizing the scientific rationale for the development and application of standards protecting public health and the environment.

Credit: 2 hours — Two lecture and no lab hours per week.

Prerequisite: None

WWT 111 Basic Wastewater Treatment 111

A course in the chemical, physical, and biological aspects of wastewater designed to familiarize students in the control aspects of wastewater effluents.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

WWT 112 Basic Water Treatment Technology 112

An introductory course in the principles of public water supply utility operation and management including the importance and use of water, sources of water, the physical, chemical, and biological quality of water, and the collection, treatment, storage, and distribution of water.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: None

WWT 113 Advanced Wastewater Treatment 113

An advanced study of course 111 dealing with the physical, chemical, and biological aspects of wasterwater effluents. Emphasis

in this course will be placed on operational principles and maintenance of wastewater treatment facilities.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Basic Wastewater Treatment 111 or permission of instructor.

WWT 114 Advanced Water Treatment Technology 114

A continuation of course 112 with emphasis on study of the operational and maintenance principles of the unit processes of water treatment and laboratory control procedures.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Basic Water Treatment 112 or permission of instructor.

WWT 115 Laboratory Analysis of Water

A course designed to familiarize the student with the principles and practices of laboratory procedures used in the control of water treatment plant processes. The course will introduce the student to basic laboratory equipment and terminology, as well as procedures used in performing chemical, physical, and biological analysis of water.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Advanced Water Treatment Technology 114 or permission of instructor.

WWT 116 Laboratory Analysis of Wastewater

A course designed to familiarize the student with the principles and practices of laboratory procedures used in the control of wastewater treatment plant processes. The course will introduce the student to basic laboratory equipment and terminology, as well as procedures used in performing chemical, physical, and biological analysis of wastewater.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Advanced Wastewater Treatment 113 or permission of instructor.

WWT 133 Water/Wastewater Internship

A course designed to provide the student with practical work experience in water and/or wastewater treatment plants.

Credit: 5 hours — One lecture and twenty lab hours per week.

WELDING

WEL 120 Gas Welding and Cutting

A study of the techniques, procedures and uses of oxyacetylene welding and cutting equipment.

Credit: 3 hours — One lecture and four lab hours per week.

WEL 123 Arc Welding I

A study of welding processes used by Industry concentrating on metallic arc welding on flat, horizontal plates.

Credit: 3 hours — One lecture and four lab hours per week.

WEL 124 Arc Welding II

A continuation of welding course 123 metallic arc welding vertical and overhead, lap, and fillet welds.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Arc Welding I 123.

WEL 125 MIG Welding

A course in the techniques of metallic inert gas (semi-auto welding). Concentration on a flat bend test — horizontal, vertical up-hill and down-hill welding.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Gas Welding and Cutting 120 and Arc Welding II 124

WEL 126 Advanced Gas Welding

A continuation of Oxyacetylene Welding 120. Horizontal, vertical, and overhead welding. Also a study of brazing and soldering techniques.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Gas Welding and Cutting 120

WEL 127 Low Hydrogen ARC Welding

A continuation of Arc Welding 124, using the low hydrogen electrode, designed for welding high sulphur and high carbon steels. Course concentrating on flat bend test, horizontal, vertical up-hill and down-hill welding.

Credit: 3 hours — Two lecture and two lab hours per week.

Prerequisite: Arc Welding II 124

WEL 128 Pipe Welding

This course is designed to teach up-hill and down-hill pipe welding — fixed position.

Credit: 3 hours — One lecture and four lab hours per week.

Prerequisite: Low Hydrogen Arc Welding 127

WEL 129 Tig Welding I

Tig welding is a gas-arc welding process which uses an inert gas to protect the weld zone from the atmosphere. The heat for welding is a very intense electric Arc which is struck between a non-consumable Tungsten electrode and work piece. Tig welding is more complex than regular Arc welding. More emphasis is placed

on the technology of metals. The student shall be competent in Arc and Gas welding and have knowledge of metals, their properties and characteristics.

Credit: 2 hours — One lecture and two lab hours per week.

WEL 130 Metal Working & Fabrications

This is a course which teaches the fundamentals of working with metal, making layouts, templates, jogs, fixtures, pipe fabrications, and planning and designing projects using both hand and power tools. The student shall be competent in machine shop and welding. Credit: 2 hours — One lecture and two lab hours per week.

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NOTE

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Shawnee College does not discriminate on the basis of race, handicap, or sex in employment, admissions, or activities.

NOTE: The catalog is not to be considered as a binding contract between Shawnee College and students. The college reserves the right at any time, without advance notice, to: (a) withdraw or cancel classes, courses, and programs; (b) change fee schedule; (c) change the academic calendar; (d) change admission and registration requirements; (e) change the regulations and requirements governing instruction in, and graduation from, the college; and (f) change any other regulations affecting students. Changes shall go into force whenever the proper authorities so determine, and shall apply not only to prospective students but also to those who are matriculated at the time in the college. When economic and other conditions permit, the college tries to provide advance notice of such changes.