

# SHAWNEE STATE GENERAL AND TECHNICAL COLLEGE 1977 - 1978

A State of Ohio Assisted Two-Year College Offering Both Academic and Technical Programs Through an

Associate of Arts Degree
Associate of Applied Business Degree
Associate of Applied Science Degree
Associate of Individualized Studies Degree



# SHAWNEE STATE COLLEGE

P.O. Box 790

Portsmouth, Ohio 45662

South Campus Phone 614-354-3205

North Campus Phone 614-259-5566

# PROGRAMS OFFERED AT SHAWNEE STATE

# ASSOCIATE OF ARTS DEGREE — University Parallel or Transfer Programs

**Teacher Education** 

Elementary Education Special Education

Secondary Education Biology — General Science

Chemistry — General Science Communications — English Emphasis

Communications - Speech Emphasis English — Comprehensive

General Speech - Speech Emphasis General Speech — Theater Emphasis

Health

Physical Education Physics — General Science

Social Studies

**Humanities/Fine Arts** 

Communications (General)

Comparative Arts English

Journalism Theater

**Social Sciences** 

**Business Administration** 

Government History

Pre-Law Psychology Social Work

Sociology

Mathematics/Sciences

Botany Chemistry Dentistry Engineering

Forestry Medical Technology

Medicine

Microbiology or Public Health and Sanitation

Optometry Pharmacv Physical Therapy Veterinary

Zoology

# ASSOCIATE OF INDIVIDUALIZED STUDIES DEGREE —

A degree designed for the purpose of meeting the specialized career needs of the individual

# **ASSOCIATE OF APPLIED BUSINESS DEGREE**

**Business Technologies** 

Accounting Banking & Finance **Data Processing & Computers** Executive Secretarial Retail Marketing Management

## ASSOCIATE OF APPLIED SCIENCE DEGREE

**Allied Health Technologies** 

Associate Degree Nursing Dental Hygiene Medical Laboratory Radiologic Practical Nursing (1 year program)

Respiratory Therapy (1 year program) Emergency Medical Technician — Paramedic

(1 year program)

**Engineering Technologies** 

Chemical Civil Engineering

Electro-Mechanical Engineering

Plastics Engineering

**Public Service Technologies** Corrections Technology

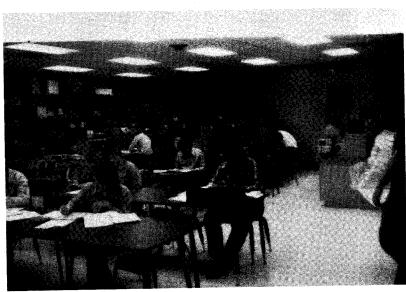
Social Services

**Natural Science Technology** 

Parks and Recreation Administration









# A MESSAGE FROM THE PRESIDENT

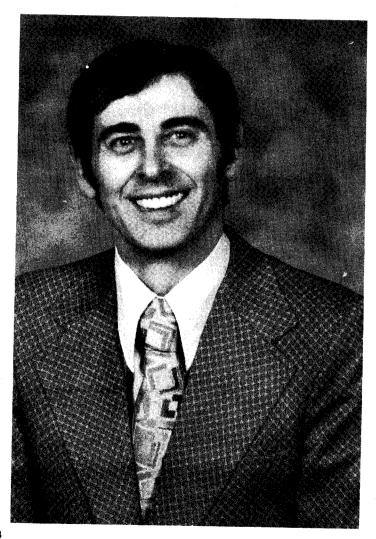
Welcome to the exciting world of Shawnee State General and Technical College. Included in this catalog is a great deal of information about programs, requirements, activities, and financial matters. This information is important and should be studied carefully if you are to know the college as you should.

Shawnee State is a comprehensive institution which offers both academic transfer and technical programs. The college, which was fully accredited by the Commission on Higher Education of the North Central Association of Colleges and Secondary Schools on April 9, 1975, should be viewed as a community-type college which is responsive to the varied higher educational needs of the people of Southern Ohio. As a responsive institution, Shawnee State has an open-door policy which encourages people of all ages and backgrounds to enroll in two-year associate degree programs, one-year certificate programs, short-term retraining programs, and continuing education courses. In addition the college has a developmental program to assist students who need special help in improving their knowledge and skills.

As a student, you will receive dedicated and personal attention at Shawnee State. The people of this college are concerned about your future and welfare and are committed to helping you achieve your educational and personal goals. You are encouraged to seek the help of administrators, counselors, faculty, or staff people when you need it. It is essential that you begin college on a good note and that you continue your education with a positive purpose. The people of Shawnee State can help you do this and can help you proceed towards the success you seek. College is a wonderful experience if you let it be. Regardless of age or background it can help you see yourself and life as you never thought possible, and can help you develop the skills necessary to be a more employable person.

Educationally, Shawnee State is a progressively excellent institution. I hope you will join us in the exciting venture of developing your knowledge, insights, and skills. Learning can be fun as well as rigorous. You will find both the fun and rigor of learning present at Shawnee State.

Dr. Robert W. Flinchbaugh President



## **ACCREDITATIONS**

Shawnee State General and Technical College is fully accredited by: NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS

In addition, the institution is approved by the following agencies:

U.S. Office of Education

American Association of Collegiate Registrars and Admissions Counselors

American Association of Junior Colleges

Ohio Board of Regents

Ohio State Department of Education

Ohio College Association

**Veterans Administration** 

**American Dental Association** 

American Medical Association

State of Ohio Board of Nursing Education and Nurse Registration

**Bureau of Vocational Rehabilitation** 

Social Security Department

College Entrance Examination Board

# TECHNICAL ADVISORY COMMITTEES

A technical Advisory Committee has been named for each technical area or cluster of technical areas. These committees, like the general committee, are advisory only, not policy-making. These committees, made up of professional and technical people competent in their fields of specialty, work directly with administration and staff on curriculum needs, employers' viewpoints, upto-date changes in industry, new equipment and process trends, recruitment ideas, and many more pertinent subjects. This committee insures the college of the latest in industrial and business developments by meeting several times a year for discussions and evaluation.









# TABLE OF CONTENTS

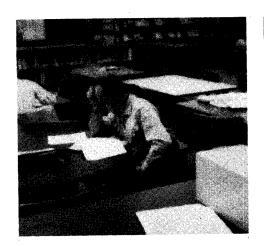
	1	Mathematics/Science	35
Programs Offered at Shawnee State	3	Pre-Rotany	36
A Message From the President	4	Pre-Chemistry	36
Accreditations	4	Pre-Dentistry	3
Technical Advisory Committees	0	Pre-Engineering	3
Admissions Procedures	11	Pre-Forestry	36
Academic Information	1/	Pre-Medical Technology	3
Fees and Expenses	16	Pre-Medicine	39
Student Activities	10	Pre-Microbiology or Public Health and Sanitation	3
Student Services and Facilities	17	Pre-Optometry	. 4
Transfer or University Parallel Programs —	00	Pre-Pharmacy	4
Associate of Arts Degree	20	Pre-Physical Therapy	. 4
Concentration Areas:		Pre-Veterinary	. 4
Education	23	Pre-Zoology	. 4
Elementary Education	24	Social Sciences	. 4
Special Education	24	Pre-Business Administration	. 4
Biology — General Science	25	Government	. 4
Chemistry — General Science	. 25	Pre-History	. 4
Communications (English Emphasis)	. 26	Pre-Law	. 4
Communications (Speech Emphasis)	. 26	Pre-Psychology	. 4
English Comprehensive	. 21	Pre-Psychology	. 4
General Speech (Speech Emphasis)	. 21	Pre-Sociology	. 4
General Speech (Theater Emphasis)	. 28		
Health	. 28	Business Technologies	. 4
Physical Education	. 29	(Associate of Applied Business Degree)	. 4
Physics — General Science	. 29	Accounting Technology	. 5
Social Studies	. 30	Banking and Finance Technology	
Humanities/Fine Arts	. 31	Data Processing and Computer Technology	
Pre-Art Major	. 32	Executive Secretarial Technology	
Pre-Communications (General) Major	. 32	Retail Marketing Management Technology	•
Comparative Arts Concentration	. 33	Allied Health Technologies (Associate of Applied Science	
Pre-English Major	. 33	Degree and Certificate Programs)	
Pre-lournalism Major	. 34	Admissions Procedures	. ;
Pre-Theater Major	. 34	Dental Hygiene	

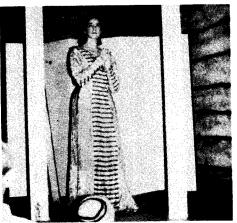
Medical Laboratory Technology	60	English	109
Radiologic Technology	62	Executive Secretarial	
Respiratory Therapy Technician	64	French	
Associate Degree Nursing	66	Geography	
Practical Nursing	68	Geology	112
Emergency Medical Technician — Paramedic	70	Government	112
Engineering Technologies		Health, Physical Education and Recreation	113
(Associate of Applied Science Degree)	73	History	110
Chemical Technology	74	Humanities	114
Civil Engineering Technology	76	Journalism	110
Electro-Mechanical Engineering Technology	78	Linguistics	110
Plastics Engineering Technology	80	Mathematics	115
Public Service Technologies		Medical Laboratory	116
(Associate of Applied Science Degree)	83	Music	317
Corrections Technology	84	Music	118
Social Services Technology	86	Nursing — Associate Degree	119
Natural Resources Technology	00	Nursing — Practical	120
(Associate of Applied Science Degree)	88	Park and Recreation Administration	
Parks and Recreation Administration	88	Pharmacy	
Inter-Institutional Advanced Study	00	Philosophy	122
(Ohio University Courses)	01	Physical Science	122
Associate of Individualized Studies Degree	91 91	Physics	122
Graduate Realtors Institute Designation	92	Plastics Engineering	122
Developmental Courses	94	Psychology	123
Course Descriptions	90	Quantitative Methods	124
Accounting	90	Radiology (X-Ray)	124
Anthropology	96	Real Estate Courses	125
Art	97	Respiratory Therapy	126
Banking and Finance	97	Retail Marketing Management	127
Biological Sciences	98	Social Science	128
Business Law	99	Social Service	128
Chemistry	00	Social Work	129
Civil Engineering	00	Sociology	129
Civil Engineering	02	Spanish	130
Comparative Arts	03	Speech	130
Corrections	03	Theater	131
Data Processing	<sup>04</sup> E	Board of Trustees	132
Dental Hygiene	JO .	Administrative Officers of the College	132
Economics	ש מע	Student Services Staff	132
Education		Library Staff	132
Electro-Mechanical Engineering	)/ <b>-</b>	aculty	133
Emergency Medical Technician — Paramedic	,,	977-78 School Calendar	134
Engineering	)K 6	College Map	135
Engineering Drawing	na - T	• • • • • • • • • • • • • • • • • • • •	

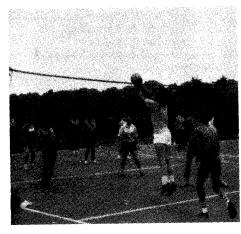
# ADMISSIONS PROCEDURES FEES AND EXPENSES **ACADEMIC INFORMATION**

# STUDENT ACTIVITIES

# STUDENT SERVICES AND FACILITIES













# **ADMISSIONS PROCEDURES**

#### **Entrance Requirements**

A graduate of Ohio high schools who is a resident of Ohio and who has never attended college will be accepted for admission as enrollment ceilings permit.

Out-of-state students who have graduated from high school and have never attended college will be accepted for admissions as enrollment ceilings permit.

Students that have not completed high school but have successfully completed the General Education Development Test for high school equivalency will be accepted for admissions as enrollment ceilings permit.

Students without a high school diploma or GED will be accepted as part-time students (less than 12 hours credit) for their first quarter as enrollment ceilings permit. Upon successful passing of their first quarter, the student will become eligible to be a full-time student.

A student who wishes to apply for any Allied Health program must either have a high school diploma or a General Educational Development certificate before an application is filed.

#### **Application for Admission**

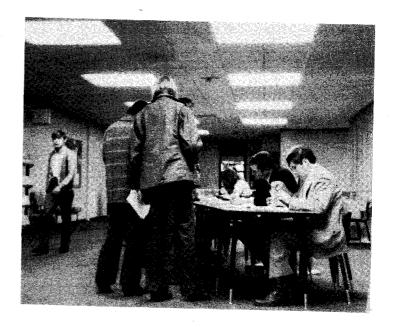
Students may submit applications for Fall admissions during the senior year of high school. (Students applying for Dental Hygiene, Medical Laboratory Technology, Respiratory Therapy, Radiology, Practical Nursing, or Associate Degree Nursing are advised to apply for admissions to these programs before March 15. Students are also advised to review the specific admissions requirements for these programs. This information can be found in the program section of this bulletin.)

It is suggested that students file applications for specific quarter enrollment prior to published registration dates for that quarter. (see College Calendar)

Admissions to Freshman studies is possible in the Fall, Winter, Spring, or Summer quarters, excepting programs in the Medical areas outlined above which are available only in the Fall quarter or by special permission of the Program Director.

It is suggested that students applying for financial aid make application for admissions and financial aid before April 15. Applications for admissions and financial aid are accepted after that date, however, financial aid is awarded on a first-come-first-serve basis.

A non-refundable fee of \$10 must accompany the application for admission.



All completed application forms must be directed to:

Shawnee State College Admissions Office P.O. Box 790 Portsmouth, Ohio 45662



#### **High School Transcript**

The two-part High School Transcript Request must be submitted to the high school counselor or principal. One part is to be returned with the student's transcript, the other may be retained by the high school as a release form. Students will be notified of admission status when both application and high school transcript are on file.

Students that did not complete high school must have a record of high school work completed, a copy of the General Education Development Certificate on file, or enroll as a part-time student for one quarter.

#### **Admissions Test**

Admissions tests are required as a part of the admissions procedures to selected programs (Medical Laboratory Technology, Dental Hygiene, Radiology, Respiratory Therapy, Practical Nursing and Associate Degree Nursing) but are not required as a part of college admissions to other educational programs.

#### **Transfer Students**

Students that have attended other colleges or universities are welcome to apply for admissions at Shawnee State. Admissions procedures for transfer students are the same as above (application and high school transcript) and the additional requirement of an official college transcript and evidence of honorable dismissal.\* See the section Academics Concerning Transfer Credit.

#### **Senior Citizens**

Shawnee State encourages senior citizens (65 or older) to audit any course of interest to them. Admissions to a course will be granted if space is available. Formal admission and registration is required but no fees will be charged.

#### **High School Students**

A student who is still attending high school may take courses at Shawnee State College while still enrolled in high school. To be admitted, the student must follow normal admissions procedures and must have a written recommendation from his principal, and written consent from his parents or guardian. College credit will be given for courses successfully completed upon evidence of high school graduation.

\*Students will be admitted as "provisional students" until such time the official transcripts have been received from the previous colleges.

# **ACADEMIC INFORMATION**

#### **Academic Integrity**

Students at Shawnee State College are required to do their own work on all tests and assignments. Any form of cheating may result in the student's being withdrawn from a particular course or courses, as well as possible dismissal from the college.

#### **Faculty Role**

Faculty expect regular and punctual attendance at all classes. Attendance policy for individual classes is made by the faculty members responsible for the class.

Grades are controlled by the faculty member responsible for the class.

In the event that a faculty member is not present at the normal time class begins, students are to remain in the classroom an additional fifteen minutes. If the faculty member has not arrived or no special instructions have been received, students may leave class without penalty.

Each faculty member posts office hours during which they are available to discuss individual problems relating to a student's academic progress. Students are encouraged to take full advantage of the advisory assistance of the faculty.

#### Grading

Final grades are mailed at the end of each quarter. Grades will not be issued orally.

#### **Description of Grades**

Grade	Description	Quality Points
A	Excellent	4.00
A- B+		3.67
		3.33
B B-	Good	3.00
Б~ С+		2.67
C+		2.33
C~	Average	2.00
C∼ D+		1.67
D+	D	1.33
D-	Poor	1.00
F	E-m.	0.67
TC	Failing	0
KE	Transfer Credit	0
NC	Credit by Exam	0
WD	No Credit	0
VVD	Withdrawal	0
P	Incomplete	0
F	Pass	0

A grade of "F" receives no credit. A student making this grade must repeat the course to receive credit.



#### **Transfer Credit**

Credit earned at regionally approved colleges and universities or regents approved Ohio colleges with a grade of "C" or better may be converted to "TC" on the student's academic record. Normally, a "D" is not transferable, however, if the "D" is part of a course sequence in which the student's average grade is "C" or better, a "D" may be transferred. The credit hours transferred do not become a part of the grade point ratio. To receive transfer credit, the student must file an official transcript of previous college work and a transfer of credit form with the Director of Admissions. Students will be notified by mail of transfer credit received.

#### **Incomplete Grades**

Students unable to attend class for extended periods of time may contact the faculty member responsible for the class requesting an incomplete grade. Incompletes must be converted to a grade 30 class days into the next quarter or they will be recorded as "F's."

#### Pass/Fail Option

Students may take courses on a pass/fail basis with permission of the course instructor. Forms for pass/fail must be completed within the first 10 class days of a regular quarter and five class days for summer sessions. Pass/fail forms can be secured from a student services counselor.

#### **Credit by Examination**

Credit may be allowed for previous academic work or experience on the basis of a proficiency examination administered by faculty. A service fee of \$20 per examination must accompany each petition. Credit requires approval of the department head. Students should request petitions from counselors.

Approved proficiency will be recorded as "KE" on the student's transcript. Credit by examination is not included in the calculation of cumulative point ratio.

Students are not eligible to take a proficiency examination for a course in which he has been enrolled for 20 class days or more.

#### **College Level Examination Program**

Students may be awarded credit for College Level Examinations taken under the College Entrance Examination Board. Students taking the general examinations in English composition, mathematics, natural sciences, and humanities with a score in the 45th percentile or above will be given "KE" credit for the first sequence course in the above areas.

Subject Examinations may be used to earn "KE" credit for courses in subject areas of the Examinations. Students must achieve in the 45th percentile or above to receive credit.

#### **Repeating Course Work**

Students may repeat courses. The student's final transcript will reflect only the highest grade received in a course.

#### **Changing Grades**

Students questioning course grades must work through the faculty member responsible for the class. If you question a grade received, contact the faculty member. The Dean of Student Services must have a written request from a faculty member in order to change a recorded grade. See access to student records policy for further information.

#### **Grade Point Ratio**

Quality points for a course are determined by multiplying the total credit hours by the numerical equivalent of the letter grade received in a course.

The formula for calculating grade point ratio is:

**Total Quality Points** 

- = Grade Point Ratio

**Total Hours Attempted** 

#### Academic Probation

Students achieving a grade point average of 1.5 or less for any quarter will be placed on academic probation for the following quarter provided their accumulative grade average does not fall below that required to remain enrolled. (See academic dismissal section below.)

#### Academic Dismissal

Students will be academically dismissed when their accumulative grade average falls below the following:

0	noung.
Credit Hours Attempted	Accumulative Grade Average
21-40	.75 or below
41-55	1.00 or below
56-65	1.25 or below
66-75 76-85	1.50 or below
85-and above	1.75 or below
oo-and above	1.90 or below

Students academically dismissed are eligible to re-enroll after one quarter.

#### Adding a Class

Students may add a class to their schedule during the first ten class days of the quarter (five days of a 5-week summer session) by completing a change order with a student services counselor.

#### Withdrawing from a Class

Students may withdraw from a class during the first 35 class days of the quarter (17 days of the 5-week summer sessions) by completing a change order form with a student services counselor.

#### Withdrawing from College

Students withdrawing from college when classes are in session must request the proper forms from a student services counselor. Grades for scheduled classes will be recorded as withdrawal (WD).

Students not following the withdrawal procedure are considered enrolled in the class and graded accordingly.

See fee schedule for refund policy.

#### **Non Credit**

Students may elect to take a course for non-credit during the first 35 class days of a quarter (17 days of the 5-week summer sessions) by completing the proper forms in the Student Services Office.

#### Credit by Arrangement

Students unable to attend regularly scheduled classes may pursue courses by arrangement. Students must register through the Student Services Office.

Students may earn up to 18 credit hours toward graduation with all credit being considered resident credit. The student is limited to eight hours of credit by arrangement per quarter. Students enrolling in a course by arrangement have until the date grades are due the following quarter to have all work completed in the course.

See the fee schedule for course by arrangement fees.

#### Dean's List

Full-time students (12 or more hours per quarter) who achieve a 3.5 or above grade point ratio will be placed on the dean's list for that quarter.

#### Student Load

Students scheduled for 12-18 credit hours are considered fulltime students. Students scheduled for less than 12 credit hours are considered part-time students. Students may schedule for over 18 hours with the permission of a student services counselor. See fee schedule for extra hour fees.

#### **Graduation Requirements**

In order to graduate, a student must have successfully completed all course requirements and have achieved a 2.0 cumulative grade ratio in all course work and his major field of study. Students having outstanding institutional bills or notes will not be issued a degree. All students are required to earn 30 hours of credit at Shawnee State in order to be eligible for graduation.

#### **Graduation with Honors**

Students with an accumulative grade point ratio of 3.5 or above prior to the quarter of graduation will be graduated with honors.

#### **Transcripts**

Each quarter students will receive a grade report that includes grades achieved that quarter and all previous quarters.

Students having errors in grade reports should contact a Student Services counselor immediately.

Students may request transcripts from the Student Services Office. There is no charge for the first transcript. Subsequent transcripts are \$1.00 each.

Requests for official transcripts must be in writing and addressed to the Director of Admissions.

#### **Visitors to Class**

Students planning to bring a visitor to a class with them are requested to obtain permission of the faculty member responsible for the class in advance of the visit.

#### Internship Guidelines

Programs requiring internship as part of the graduation requirements have guidelines for internship established by student advisors and faculty. Students are urged to request a copy of these guidelines from faculty advisors.

# **FEES AND EXPENSES**

#### **Registration Fees**

Registration fees are payable at the Business Office (South Campus) prior to the opening of classes and in accordance with instructions issued with your quarterly bill. For students registering during late registration fees are assessed as part of the registration process and are due at that time. Checks and money orders should be made payable to Shawnee State College in the exact amount of the fees. It is important that the student retain all fee receipts.

Payment of fees owed is a prerequisite to official enrollment and all students should have sufficient funds (cash and/or financial aid) to cover these expenses.

#### Schedule of Fees

Schedule of Fees	Resident of Ohio	Nonresident
Instructional fee Full Time Student (12-20 cr. hrs.)	\$200.00	\$225.00
Part Time Student (1-11 cr. hrs.)	17.00 per cr. hr.	19.00 per cr. hr.
General Fee Full Time Student	25.00	25.00
Activity Fee Full Time Student Part Time Student	5.00 5.00	5.00 5.00
Extra fee for each quarter hour in excess of 20 hours	15.00 per cr. hr.	17.00 per cr. hr.
Credit by Examination Course by Arrangement Graduation Fee	20.00 per course 30.00 per cr. hr. 15.00	30.00 per cr. hr. 15.00

\*Shawnee State College reserves the right to make, without prior notice, any fee adjustments that may become necessary.

#### Fee Deferment

The fee deferment is a request from the Financial Aids or Veterans Office for the Business Office to defer a student's fees until later in the quarter. The Financial Aids and Veterans Office may, at the discretion of the Director, issue fee deferment requests for students in the following categories:

- 1. First quarter veterans with applications for veterans benefits in process
- 2. Enrolled veterans experiencing pay problems which are verified by the Veterans Administration

## 3. Financial aid applicants with material in process

#### Refund of Fees

Time of Withdrawai

Continuing students dropping hours by change order prior to or during the first fifteen (15) days of the quarter, when such changes result in a reduction of fees, are entitled to receive a 100 percent refund of the reduction. Changes made after the fifteenth (15th) day of the quarter will result in no refund.

Students that **officially** withdraw from Shawnee State will receive a refund, if due, based upon the following schedule. Students that do not officially withdraw *are not* eligible for any refund and fees assessed are due and payable.

Amount of Fee Refund

(Regular Term)	· ····································
1 to 5 class days	Full amount paid less \$10.00
6 to 10 class days	75% of instructional fee
11 to 15 class days	50% of instructional fee
16 to 20 class days	25% of instructional fee
over 20 class days	No Refund
Time of Withdrawal (5 week session)	Amount of Fee Refund*
1 to 3 class days	Full amount paid less \$10.00
4 to 6 class days	75% of instructional fee
7 to 9 class days	50% of instructional fee
10 to 12 class days	25% of instructional fee
over 12 days	No Refund

\*This schedule for refunds will apply to students registered only in a five week session.

Please note: Students taking classes from both a regular quarter and a five week session will be issued refunds under the regular Term Policy.

Refunds are issued 30 days after the date of the withdrawal or change has been issued.

Questions about the above information should be referred to the Business Office.

#### Late Registration and Late Payment Policy

A late registration fee of \$10.00 will be assessed all students enrolled in the previous quarter that do not register during the announced early registration period.

A late payment fee would normally not be applicable since payment is a prerequisite to registration. However, should exceptions be made to the Registration Fee section a late payment fee of \$20.00 will be assessed by the Business Office.

#### Miscellaneous Fees

#### **Activity Fee**

All students will be assessed a \$5.00 activity fee for each quarter. This fee is to support all student activities. No activity fees are assessed for the Summer Quarter.

#### **Application Fee**

A \$10.00 application fee, non-refundable, must accompany all admission applications.

#### **Deposit Fee**

All students accepted into allied health programs must pay a \$100 deposit on tuition before the set deadline date or make other arrangements with the Director of Financial Aid. The \$100 is refunded if the student is not enrolled into the program. If enrolled, the \$100 is deducted from the first quarter's tuition.

#### Transcript Fee

The college will produce one official transcript upon written request from the student at no cost. Additional transcripts will be reproduced at a cost of \$1.00 per copy.



## STUDENT ACTIVITIES

#### Music and Drama

The music and theatre departments at Shawnee State General and Technical College actively plan performances the year round. During the regular school year the music department presents at least three concerts by the performing choral group, the Shawnee Choir. These performances feature both classical and popular music. The Choir is made up of both college students and community members whose common interest is singing good music. The Choir frequently performs for civic and service organizations outside the college community, as well. Shawnee Choir is open to any Shawnee State student.

The drama department presents several dramatic productions during the year. These shows tour area high schools and are also presented on campus. Each spring the music and theatre departments combine to present a musical at Bonneyfiddle. The Bonneyfiddle productions are open not only to Shawnee State performers, but to community and area performers as well.

In addition to the large-scale productions, the Shawnee State Players stage at least one children's theatre production during the year.

#### **Cultural Affairs**

A committee composed of both faculty and students direct a program of cultural affairs. This committee arranges for speakers, musical groups, and other activities of a cultural nature to appear on campus.

#### Interscholastic Athletics

Shawnee State College's philosophy holds that there is more to learning than just academics. Besides attending classes, every student has an opportunity to participate in a recreational or athletic area.

Varsity athletics supplement the classroom experience by emphasizing cooperation, leadership, courage, sacrifice and discipline.

Athletic policies at Shawnee State conform to the policies and regulations of the National Junior College Athletic Association of which they are a member. Presently within the NJCAA framework, Shawnee State teams participate on an intercollegiate level in basketball, golf, and tennis. The college plans to expand with additional programs in the near future.

An athletic and physical education complex is now on the drawing board and should be a reality by 1978.



#### Intramural Athletics

The Department of Physical Education is striving to provide an intramural program that offers a wide variety of athletic and recreational activities. It is felt that the students at Shawnee State College should have an opportunity to participate in a program that gives them the freedom to choose leisure time activities that will best meet their individual needs. Our goal is to have every student participating in intramural activities. To accomplish this goal there must be close cooperation between the student body, the Intramural Department and College officials. Students are asked to participate in planning and supervising various aspects of the program.

#### Tentative Intramural Events 1977-78

#### **Team Events**

- 1 Touch Football
- 2. Basketball
- 3. Volleyball
- 4. Bowling
- 5. Softball

#### Individual Events & Dual Events

- 1. Badminton
- 2. Golf
- 3. Tennis
- 4. Table Tennis
- 5. Archery
- 6. Bridge
- 7. Chess

# STUDENT SERVICES AND FACILITIES

#### Student Services Counseling

The College provides a wide variety of counseling services through the different offices of Student Services. Admissions, placement, financial aid, veterans, educational, vocational, and personal-social counseling are available to students without cost. Counseling services are available to the student upon request at the Student Services Offices.

Student Services Offices are open from 8:00 a.m. to 8:00 p.m., Monday thru Thursday and 8:00 a.m. to 4:00 p.m. on Friday.

Counseling sessions are confidential.

#### **Faculty Advising**

Academic advising is provided by faculty advisors. The purpose of faculty advisement is to assist students with their immediate academic concerns. Faculty members meet with students by appointment and each faculty member will have available hours posted near his/her office.

#### **Developmental Education**

Developmental courses in mathematics, biology, chemistry, physics, and study methods are offered at no cost to students who have completed the admissions process. Students take these courses to qualify for certain programs, or to increase their chances for success in college.

A peer tutoring program is also available to students upon faculty or counselor recommendation. Students may receive academic tutoring of up to three hours per week for courses in which they are experiencing academic difficulty. If you are interested in receiving the service, please contact a faculty member or a student services counselor. If you are interested in being a tutor, please contact the developmental education department. Tutors are reimbursed for their tutoring time.

#### Financial Aid

An extensive Financial Aid Program is available to assist students in meeting some of the expenses of a college education. The Financial Aid Program is administered by the Financial Aids Office, and the program includes four categories: scholarships, grants, loans, and employment.

Scholarships: The college administers a limited number of special scholarships for students demonstrating a high degree of academic ability or special talents. Students interested in scholarships should contact the Financial Aids Office.

Grants: The college administers three types of grant programs: the Ohio Instructional Grant (O.I.G.), the Basic Educational Opportunity Grant (BEOG), and the Supplemental Educational Opportunity Grant (SEOG). Grants are not repaid. Interested students should contact the Financial Aids Office.

Loans: National Direct Student Loans are available to students who demonstrate financial need through the filing of a College Scholarship Service Financial Aid Form. All loans are interest free until nine months after the student graduates or leaves school. At that point, repayment of the loan at simple interest will commence.

Questions regarding state or federal guaranteed loans should be addressed to the student's local bank or lending agencies.

Emergency Loans are available on a limited basis to students needing short-term assistance with direct or related educational expenses. Amounts of these loans are not to exceed \$50.00.

College Work-Study: The College Work-Study Program is available to students who can demonstrate financial need through the completion of the FAF and the College Financial Aids Application.

Part-time Student Employment: Part-time student employment is available on a limited basis through the Placement Office of the Student Services Office. This is not part of the Financial Aid Program, therefore, evidence of financial need is not necessary.

The application for financial aid must be properly completed and returned to the office of Student Financial Aid and the Financial Aid Form sent to Princeton, New Jersey. The FAF has normally taken 30 days to be processed and returned to Shawnee State College. The Basic Educational Opportunity Grant and Ohio Instructional Grant require separate applications.

### Veteran's Administration Benefits

The programs at Shawnee State are approved by the Veterans Administration for the education of veterans and their eligible dependents. Students interested in V.A. benefits should contact the Veterans Affairs Office located in the Office of Student Services.

#### **Placement Services**

The nature of the programs offered at Shawnee State College make two types of placement necessary: Occupational and Transfer Placement.

Occupational Placement: Students interested in employment after graduation should contact the Placement Office in advance of the quarter they plan to graduate. Companies and business establishments conduct annual recruiting campaigns for two-year graduates. The Office for Occupational Placement is located at the North Campus.

Transfer Placement: Students interested in continuing their education at a four-year college or university should contact the Placement Office two quarters before they plan to graduate. Recruiters from four-year institutions will be invited on campus. The Office of Transfer Placement is located at the South Campus.

Placement services are available to graduating students and alumni of the college at no cost.

#### Housing

There are no dormitories or campus housing at Shawnee State. The college makes available to students the names and addresses of area residents who have rooms and apartments for rent. The college does not inspect or approve available housing, but the list gives the student and his/her parents an idea of where to locate housing.

The College does not accept responsibility for agreements, leases, or contracts between students and landlords.

#### Parking

Adequate parking facilities are adjacent to the College. Students should park in designated student parking areas and exercise proper driving courtesy. The College assumes no responsibility for any losses which may occur in the parking area.

#### Bookstore

The College operates a bookstore for student convenience. Bookstore hours will be posted on the door.



#### Closing the College

If an emergency would exist because of mechanical failure that would necessitate the closing of the college, the announcement would be carried over WPAY, WIOI, and WNXT radio and Teleprompter Cable T.V.

#### Libraries

Library services are available to serve the needs of students at both campuses. Students should fill out borrowers' cards after registration. Please ask the librarian for aid in obtaining information and printed materials you would like to have.

#### Student Insurance

Information concerning student health insurance is included in the registration material, or can be obtained at the Student Services Office.

#### **Identification Cards**

I.D. cards will be issued to Shawnee State College students. An I.D. card is a necessary source of campus identification in utilizing the library and student activities. Students must present evidence of registration certification at the time the I.D. card is made. A notice will be placed on the bulletin boards announcing the room and time when I.D. pictures will be taken.

# SHAWNEE STATE GENERAL AND TECHNICAL COLLEGE

# ASSOCIATE OF ARTS DEGREE UNIVERSITY PARALLEL/TRANSFER CURRICULA

# TRANSFER OR UNIVERSITY PARALLEL PROGRAMS

#### **Transfer or University Parallel Programs**

The various transfer curricula developed at Shawnee State College are designed with the major objective of enabling students to complete the first two years of study toward a baccalaureate degree. In awarding the Associate of Arts Degree, Shawnee State verifies that the student has successfully completed the first two years of a four-year program and is ready for upper division work in a baccalaureate college or university. Students can pursue transfer programs in the fields of social and behavioral sciences, natural sciences, humanities, fine arts, teacher education, and several other preprofessional programs.

Because curricula of the first two years in various colleges and universities may differ, students who plan to transfer to a baccalaureate institution should follow the procedure outlined below:

- 1. Secure a catalog of the institution to which he wishes to transfer and become familiar with its admission requirements and suggested freshmen and sophomore courses in his major field of interest.
- 2. Consult with a counselor or academic advisor at Shawnee State about fulfilling these requirements.
- 3. Confer with an admissions officer at the senior institution for further information about transfer regulations and applicability of credit.

The transfer programs which are outlined are intended to indicate typical requirements in various programs. The student assumes responsibility for course selections necessary to satisfy the requirements of the senior institution to which he intends to transfer.

- I. Procedures defined for transferring to a baccalaureate institution
  - A. Associate of Arts Degree in General Studies
  - B. Suggested Concentration Areas (Ohio Univ. Guidelines)
  - C. Education:

**Elementary Education** Special Education

Secondary Education

Biology — General Science

Chemistry — General Science

Communications — English Emphasis

Communications — Speech Emphasis

English — Comprehensive

General Speech — Speech Emphasis

General Speech — Theater Emphasis

Health

Physical Education

Physics — General Science

Social Studies

#### D. Humanities/Fine Arts

Art

Communications (General)

Comparative Arts

English

Journalism

Theater

#### E. Mathematics/Sciences

Botany

Chemistry

Dentistry

Engineering Forestry

Medical Technology

Medicine

Microbiology or Public Health and Sanitation

Optometry

Pharmacy

Physical Therapy

Veterinary

Zoology

F. Social Sciences

Business Administration

Government

History

Pre-Law

Psychology

Social Work

Sociology

#### Associate of Arts Degree (General Studies)

(College or University Parallel Programs)

Courses offered under the Associate of Arts Degree at Shawnee State resemble those courses typically offered during the first two years at a baccalaureate institution. Students may enroll in courses for personal enhancement, or enroll in a program developed specifically for transfer to a four-year college or university. The A.A. degree has been specifically designed to permit a broad curricula sampling in the areas of communications, social sciences, natural sciences and humanities, thus preparing the student for more advanced study at the receiving institution.

#### Requirements for the Associate of Arts Degree

A total of 90 qtr. hours of credit (minimum) — 30 qtr. hours of which must be in courses numbered 200.

2.00 cumulative average

#### I. Degree Core Requirements

In all of the several areas of concentration at Shawnee State, the "core requirements" in general education must be met. The requirements from 49 to 60 quarter hours can be satisfied by course offerings in four general areas.

A. Communications (11 qtr. hrs.)

Two courses from: Eng. 111, Eng. 112, Eng. 115, Eng. 140A, B, C or D (Topics in English Language and Literature), and Speech 101 (Speech I) or Speech 102 (Speech II)

B. Natural Sciences (12-15 gtr. hrs.)

At least two courses from one area:

- A. Biological Sciences (Bio. 111, 112, 113)
- B. Chemistry (Chem. 121, 122, 123 or Chem. 141, 142, 143)
- C. Geology (Geo. 101, 102, 103)
- D. Physics (Phy. 201, 202, 203)
- E. Physical Sciences (Phy. Sc. 101, 102, 103)
- F. Mathematics (Math 120, 121, 130-32, 150, 201-203)

- C. Humanities and Social Sciences (24-30 qtr. hrs.)
  - 1. (Social Sciences) (12-15 qtr. hrs.)
    - Three courses covering two areas: A. Economics (Econ. 101, 102)
    - B. Psychology (Psy. 101, and 131 or 173)
    - C. Geography (All Geog. courses)
    - D. Government (All Govt. except 290, 299)
    - E. History (All Hist. except 290)
    - F. Sociology (Soc. 101 and 201)
      G. Anthropology (Anthro. 201 and 250)
  - 2. (Humanities) (12-15 gtr. hrs.)

Three courses covering two areas:

- A. Philosophy (Phil. 101, 102, 103)
- B Comparative Arts (CA 101, 102, 103)
- C. Humanities (Hu. 101, 102, 103)
- D. Art (Art 100, 101, 102, and 103)
- E. Modern Language (Fr. 111, 112, 113 or Spanish 111, 112, 113)
- F. Music (Mus. 120, 121, 122, 123, and 160)
- G. Theater (Th. 101A, B, C, or 201)
- D. Health/Physical Education (2-4 qtr. hrs.) Two activity courses or Health 202.

#### II. Concentration Area.

**Selected Specialized Courses** 

# SHAWNEE STATE GENERAL AND TECHNICAL COLLEGE University Parallel/Transfer Curricula

The suggested transfer curricula which follow have been based upon various baccalaureate degree requirements using Ohio University as a guide. It is important to note that they are suggestions only, and that the personal preference and the college or university to which the student may transfer will ultimately determine appropriate course selections and program.

## **CONCENTRATION AREAS**

#### Education

Elementary Education
Special Education
Secondary Education:
Biology — Gen. Sci.
Chemistry — Gen. Sci.
Communications — English Emphasis
Communications — Speech Emphasis
English — Comprehensive
General Speech — Speech Emphasis
General Speech — Theater Emphasis
Health
Physical Education
Physics — Gen. Sci.
Social Studies

#### **ELEMENTARY EDUCATION\***

Freshman  1 Science	12 10 3 4 8 8 1	Sophomore  3 Social Sciences (Electives) Ling. 270 Music 160, 161 HPER 202 Personal and Community Health HPER 270 Phy. Ed. for the Elem. Teacher HPER (Activity Courses) Art for the Elem. Teacher I, II Education Psy. (275) 4 Education 101 (Intro. to Ed.)	12 5 6 4 3 1 6 5 4
		Total	46

- Three courses required must include at least one course in Biology and one in Physical Science. (All courses must include lab).
- 2. Speech 101 for high school deficiency. Speech 102 if you have HS speech credit.
- Social Science Electives must include one course in Am. Hist. or Am. Govt. and Geog. 121 Cultural Geog.
- 4. Depending on school to which the student transfers.
- \*A 20 qtr. hr. concentration is required for a Baccalaureate Degree for the College of Education at Ohio University. This concentration may be in any department outside the College of Education, but may be taken in the School of Health, Physical Education and Recreation or School of Home Economics.

#### **EDUCATION** — SPECIAL EDUCATION

Freshman  English (111, 112, 115, 140 A,B,C,D)  Psychology 101  Social Sciences (Core Requirements)  Natural Sciences (Core Requirements — must include lab)  Humanities (Core Requirements)  Physical Education  Electives (Math 150, Psy. 131, Psy. 241)	8 4 8 8 8 8 1	Sophomore  Speech 101 or 102	3 4 3 6 5 6 1
Total	45	Total	45

## EDUCATION (BIOLOGY — GENERAL SCIENCE)

Freshman English (111, 112, 115, 140 A,B,C,D) Chemistry 141, 142, 143 Biology 111, 112, 113 *Math 201, 202 Physical Education  Total	15 15 10	Sophomore  Speech 101 or 102  Physics 201, 202, 203  Humanities (Core Requirements)  Social Sciences (Core Requirements — Psy. 101 required)  Psychology 275 (Educ. Psy.)  Electives (Sciences)	12 12 12 5	
		Total	48	

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

## EDUCATION (CHEMISTRY — GENERAL SCIENCE)

Freshman English (111, 112, 115, 140 A,B,C,D) Chemistry 141, 142, 143 *Math 201, 202, 203 Humanities (Core Requirements) Social Sciences (Core Requirements — Psy. 101 required) Physical Education Total	15 4	Sophomore Chemistry 205, 206, 207 Physics 201, 202, 203 Humanities (Core Requirements) Psychology 275 (Educ. Psy.) Chemistry 225 Physical Education Speech 101 or 102	12 8 5 4
	•	Total	45

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

# EDUCATION — COMMUNICATIONS (ENGLISH EMPHASIS)

Freshman  English (111, 112, 115, 140 A,B,C,D)	Hours  8  12 12 12 12 145	Sophomore Psychology 275 Speech 101 or 102 Speech 105 (Intro. to Mass. Comm.) Speech 220 or Thar. 220 (Oral. Inter. of Lit.) Speech 230 (Comm. Theory and Process) Speech 215 (Discussion) Speech 205-A (Debate) Physical Education English 201, 202, or 203 English 204, 205, or 206 English 225 or 226 Electives (English)	5 3 4 4 4 4 4 4 4 4 4 4
		Total	45

## **COMMUNICATIONS — SPEECH EMPHASIS**

Freshman	Hours	Sophomore	Hours
English 111, 112, 115, 140 A,B,C,D	8	Psychology 275 (Educ. Psy.)	2
Speech 102 (Public Speaking)	3	Thar. 100 (Intro. to Theater)	4
Natural Sciences/Math (At least 1 course in each)	12	Journalism 231 (News Reporting)	7
Social Sciences (Core Requirements — Psy. 101 required)	12	English 201, 202, or 203	7
Humanities (Core Requirements)	12	Physical Ed	
TOTAL	47		18
TOTAL	••	Minimum of 27 hrs. chosen from the following:	
		Speech 105 (Intro. to Mass. Comm.)	4
		Speech 110 (Listening Behavior)	2
		Speech 125 (Parliamentary Usage)	3
		Speech 205-A (Argumentation and Debate)	
		Speech 205-B, C (Intercollegiate Debate)	
		Speech 215 (Group Discussion)	
		Speech 220 or Thar. 220 (Oral Interp.)	
		Speech 225 (Verbal Lang. Behavior)	3
		Speech 230 (Comm. Theory and Process)	4
			32
		Total	50

## **EDUCATION** — **ENGLISH COMPREHENSIVE**

Freshman  English (111, 112, 115, 140 A,B,C,D)  Speech 101 or 102  Sciences/Math (1 science and 1 math)  Social Sciences (Core Requirements — Psy. 101 required)  Humanities (Core Requirements)  Physical Education  Electives	8 3 12 8 8 2 4	Sophomore  Social Science (Core Requirements)  Humanities (Core Requirements)  Psychology 275 (Educ. Psy.)  English 201, 202, or 203  English 204, 205, 206  English 225 and 226  Electives (Must include 1 English course above freshman level)	4 5 4 8 8
		Total	45

# EDUCATION — GENERAL SPEECH (SPEECH EMPHASIS)

Freshman  Speech 101, 102  Speech 105 (Intro. to Mass Comm.)  English (111, 112, 115, 140 A,B,C,D)  Natural Sciences/Math (Core Requirements — at least 1 course in each)  Psychology 101  Humanities (Core Requirements)  Total	6 4 8 12 4 12 46	Sophomore  Psychology 275 (Educ. Psy.) Social Sciences (Core Requirements) Physical Ed. Thar. 220 or Speech 220 (Oral Inter.) Speech 205-A (Argumentation & Debate) Speech 205-B, C (Intercollegiate Debate) Speech 215 (Group Discussion) Speech 110 (Listening) Speech 225 (Verbal Lang. Beh.) Speech 230 (Comm. Th. and Process) Electives (Thar. 215, Thar. 101)	8 2 4 4 4 2 3 4

Total

45

# EDUCATION — GENERAL SPEECH (THEATER EMPHASIS)

Freshman	Hours	Sophomore	Hours
Speech 101, 102	6	Psychology 275 (Educ. Psy.)	5
English (111, 112, 115, 140 A,B,C,D)	8	Social Sciences (Core Requirements)	4
Natural Sciences/Math (Core Requirements — At least	_	Physical Ed	2
1 course in each)	12	Thar, 100 (Intro. to Theater)	3
Social Sciences (Core Requirements — Psy. 101 required)	. 8	Thar. 101 A,B,C (Shawnee Co.)	9
Humanities (Core Requirements)	12	Thar, 201 (Children's Theater)	5
riamaminos (ooro rioganomono)		Thar. 215 (Principles of Acting)	3
Total	46	Thar, 220 or Speech 220 (Oral Interp.)	4
		Thar. 225 (Stage Costume and Make-up)	3
			38

#### **EDUCATION — HEALTH**

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C,D)	4	English (111, 112, 115, 140 A,B,C,D)	4
Speech (101, 102) one course	3	Psychology 275 (Educ. Psy.)	5
HPER 261 (Introduction to P.E. & Health)	2	Comparative Arts and/or Philosophy	4
Psychology 101	4	Biology 290, 291 (Anatomy & Physiology I, II)	10
Sociology 101	4	HPER 202 (Personal and Community Health)	4
Biology 111	5	HPER 110 (3 Activity Classes)	3
Math (1 course)	4-5	HPER 204 (Drugs, Alcohol and Tobacco)	3
Comparative Arts and/or Philosophy	8	HPER Electives	13
HPER 227 (First Aid)	3		
HPER 234 (Laboratory Experience in Phys. Ed.)	2	Total	46
HPER 110 (3 Activity Classes)	3		
HPER 295 (Independent Study)	2		
Elective	2		
LIGOLIYO			

46-47

Total

#### **EDUCATION — PHYSICAL EDUCATION**

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C,D)	4	English (111, 112, 115, 140 A,B,C,D)	4
Speech (101, 102) one course	3	Psychology 275 (Educ. Psy.)	5
HPER 261 (Introduction to P.E. & Health)	2	Comparative Arts and/or Philosophy	4
Psychology 101	4	Biology 290, 291 (Anatomy & Physiology I, II)	10
Social Science (Elective)	4.	HPER 202 (Personal and Community Health)	4
Biology 111	5	HPER 110 (3 Activity Classes)	3
Math (1 course)	4-5	HPER 250 (Recreation)	3
Comparative Arts and/or Philosophy	8	HPER 204 (Drugs, Alcohol and Tobacco)	3
HPER 227 (First Aid)	3	HPER 239 Athletic Officiating Football	6
HPER 234 (Laboratory Experience in Phys. Ed.)	2	240 Athletic Officiating Basketball	
HPER 110 (3 Activity Classes)	3	241 Athletic Officiating Baseball (2 courses)	
HPER 295 (Independent Study)	2	242 Athletic Officiating Track	
HPER 290 (The Art of Sport Officiating)	2	HPER 281 (Administration of Intramural Athletics)	4
Total	46-47	Total	46

### **EDUCATION (PHYSICS — GENERAL SCIENCE)**

Freshman English (111, 112, 115, 140 A,B,C,D) Chemistry 141, 142, 143 *Math 201, 202, 203 Humanities (Core Requirements) Social Sciences (Core Requirements — Psy. 101 required) Physical Education	. 15 15 4 4 2	Sophomore Physics 201, 202, 203 Humanities (Core Requirements) Psychology 275 (Educ. Psy.) Social Sciences (Core Requirements) Electives (Sciences)	8 5 8
Speech 101 or 102	3	Total	45
Total	51		

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

#### **EDUCATION — SOCIAL STUDIES\***

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, or 140 A,B,C,D)	8	History 111, 112, and 113	12
Laboratory Sciences (two quarter sequence)		Government 101 and 102	8
Mathematics	4-5	Economics 101 and 102	8
Humanities (Core Requirements)	12	Geography 101	4
History 101, 102, and 103	12	Psychology 275 (Educ. Psy.)	
Psychology 101	4	Sociology 101	
		Anthropology 201	4
	48-51	Speech 101 or 102	
		Physical Education	
		Total	50

\*For preparation leading to state teacher certification in a history-government comprehensive, students consult faculty in the Social Science Division and the appropriate catalog of the college to which they plan to transfer.



## **CONCENTRATION AREAS**

#### **Humanities/Fine Arts**

Art
Communication (General)
Comparative Arts
English
Journalism
Theater

#### PRE-ART MAJOR

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140, A,B,C,D)	8	Speech 101 or 102	3
Natural Sciences (Core Requirements)	12	Art 101, 102, 103 (Studio Foundations)	12
Social Sciences (Core Requirements)	12	Art 221, 222, 223 (Painting I, II, & III)	
Art 100 (Fundamentals of Vis. Art)		and/or	
Comparative Arts (101, 102, 103)		Art 231, 232, 233 (Ceramics I, II, & III)	12
Physical Education	1	Art 271 (Life Drawing I)	4
,		Art 261, 262, 263 (Art History I, II, III)	9
Total	46	Physical Education	1
		Electives	4 .
		Total	45

# PRE-COMMUNICATIONS (GENERAL) MAJOR

Freshman	Hours	Sophomore	Hours
• • • • • • • • • • • • • • • • • • • •	110013	•	2
English (111, 112, 115, 140 A,B,C,D)	8	Speech 101 or 102	3
Natural Sciences (Core Requirements)	12	Speech 230 (Comm. Th. and Process)	4
Social Sciences (Core Requirements)		Jour. 105, or Speech 105 (Intro. to Mass Comm.)	4
Humanities (Core Requirements)	12	Speech 215 (Group Discussion)	4
Physical Education	2	Speech 205-A (Intercollegiate Debate)	4
111,01041 2444110111111111111111111111111111		Thar. 215 (Acting), or Sp. 220/Thar. 220 (Oral Interp.)	3
Total	46	Psychology 101 (Principles of Psychology)	4
		Electives	19
		Total	45

#### **COMPARATIVE ARTS CONCENTRATION**

Freshman  Speech I or Speech II  English (111, 112, 115, 140, A,B,C,D)  Natural Sciences (Core Requirements)  Social Sciences (Core Requirements)  Comparative Arts 101, 102, 103  Physical Education  Total	Hours 3 8 12 12 9 2 46	Sophomore           Music (choose 15 hours)           Music 180 (College Choir)         2           Music 120 (Music Literature)         2           Music 221 (Music of Baroque Period)         3           Music 222 (Music of Classical & Romantic Period)         3           Music 223 (Contemporary Music)         3           Music 175 (Men's Glee Club)         1           Music 176 (Women's Glee Club)         1           Music 170 A, B, C (Voice)         3           Music 101 (Theory)         3           Theater (choose 15 hours)         9           Thar. 215 (Principles of Acting)         3           Thar. 225 (Stage Costume & Make-Up)         3           Art (choose 15 hours)         4           Art 101 (Studio Foundations)         4           Art 103 (Studio Foundations)         4	18 15
		Electives	48

Students who enroll in this program should do so with the prior knowledge that when they transfer to a four-year institution they will in most circumstances be required to enroll in only one of the three areas (Theater, Art or Music). The courses taken in the other areas will be electives.

#### **PRE-ENGLISH MAJOR**

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C,D)		Speech 102 (Public Speaking)	
Humanities (Core Requirements)	12	English (201, 202, 203)	4
Language 111, 112, 113	12*	English (204, 205, 206)	4
Natural Sciences (Core Requirements)	12	English 225, 226	8
P. E. or Health	2	Language 211, 212, 213	12*
		Social Science (Core Requirements)	12
Total	46	English Elective	4
		Total	47

<sup>\*</sup>Dependent upon previous language experience and college to which the student transfers (see explanation in History Section).

#### **PRE-JOURNALISM**

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C,D)	8	Speech 102 (Public Speaking)	3
Government 102 (Logic)	4	Economics 101, 102	_
Natural Science (Core Requirements)	12	History 101, 102, 103 or History 111, 112, 113	12
Philosophy 101, 102, 103 or Lang. 111, 112, 113	12	Psychology 101	4
Journalism 105 (Intro. to Mass Comm.)	4	Journalism 231 (News Reporting)	4
Soc. 201 (Current Social Problems)		Physical Education	
Physical Education	1	Electives (Social Sciences)	13
Total	45	Total	45

#### PRE-THEATER MAJOR

Freshman English (111, 112, 115, 140, A,B,C,D) Natural Sciences (Core Requirements) Social Sciences (Core Requirements) Humanities (Core Requirements) Physical Education Total	8 12 12 12 12 1 1	Sophomore  Speech 101 or 102 3 English Classes at 200 level or above Thar. 101 A, B, C Thar. 225, Costume and Make-Up Thar. or Inco 220 Thar. 215 Thar. 100 Thar. 201	3 12 9 3 3 3 3 5
		Thar. 230	3 1 ———————————————————————————————————

# **CONCENTRATION AREAS**

## Mathematics/Sciences

Botany
Chemistry
Dentistry
Engineering
Forestry
Medical Technology
Medicine
Microbiology or Public Health and Sanitation
Optometry
Pharmacy
Physical Therapy
Veterinary
Zoology

## **PRE-BOTANY MAJOR**

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C,D)	8	Chemistry 205, 206, 207	12
Speech 102		Biology 211	5
Chemistry 141, 142, 143	4 ==	Biology 225	5
Biology 111, 112, 113	4-	Biology 210	5
*Math 201, 202		Social Sciences (Core Requirements)	
Physical Education	_	Humanities (Core Requirements)	12
Total	53	Total	51

\*Math 130 sequence may be elected in preparation for calculus.

## PRE-CHEMISTRY MAJOR

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C,D)	8	Chemistry 205, 206, 207	12
Speech 102		Physics 201, 202, 203	12
Chemistry 141, 142, 143		Humanities Elective (Core Requirements)	8
*Math Calculus 201, 202, 203		Social Science (Core Requirements)	8
Humanities Elective (Core Requirements)		Chemistry 225	4
Social Science (Core Requirements)		Physical Education	1
Physical Education		Total	45
Total	50		

\*Math 130 sequence may be elected in preparation for calculus.

## PRE-DENTISTRY MAJOR

Freshman English (111, 112, 115, 140 A,B,C,D) Speech 102 (Public Speaking) Chemistry 141, 142, 143 *Math 201, 202 Biology 111, 113 Biology 225 Physical Education	8 3 15 10 10 5 2	Sophomore Chemistry 205, 206, 207	12 12
Total	53		

\*Math 130 sequence may be elected in preparation for calculus.

# PRE-ENGINEERING MAJOR

A student may obtain one full year in the various areas of Engineering. The freshman schedule should be built around the freshmen curriculum of the college or university to which you plan to transfer.

# PRE-FORESTRY MAJOR

Freshman English (111, 112, 115, 140 A,B,C,D) Speech 102 Chemistry 141, 142, 143 *Math 201, 202 Biology 111, 112, 113 Physical Education	3 15 10	Sophomore  See counselor for additional information regarding the Forestry School of Transfer.
Total	53	

\*Math 130 sequence may be elected in preparation for calculus.

# PRE-MEDICAL TECHNOLOGY MAJOR

Freshman Chemistry 141, 142, 143  *Math 201, 202 Speech 102 Biology 111, 113 English (111, 112, 115, 140 A,B,C) Physical Education	10 3 10 8	Sophomore Chemistry 205, 206, 207 Chemistry 225 General Genetics (Biology 225) Social Science (Core Requirements) Humanities Elective (Core Requirements)	4 5 12
Total	48	Total	45

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

#### **PRE-MEDICINE MAJOR**

Freshman English (111, 112, 115, 140 A,B,C,D) Speech 102 Chemistry 141, 142, 143 Biology 111, 113 *Math 201, 202	3 15 10	Sophomore Chemistry 205, 206, 207 Zoology 225 Physics 201, 202, 203 Social Sciences (Core Requirements) Humanities Electives (Core Requirements)	5 12 8
Social Sciences (Core Requirements) Physical Education	2	Total	49
Total	52		

\*Math 130 sequence may be elected in preparation for calculus.

# PRE-MICROBIOLOGY or PUBLIC HEALTH & SANITATION MAJOR

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C,D)	8	Chemistry 205, 206, 207	12
Speech 102		Physics 201, 202, 203	
Chemistry 141, 142, 143		Social Sciences (Core Requirements)	12
Biology 111, 112, 113		Humanities Elective (Core Requirements)	
*Math 201		Physical Education	2
Biology 225		Total	50
Total	51		

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

### PRE-OPTOMETRY MAJOR

Freshman English (111, 112, 115, 140 A,B,C,D) Speech 102 Chemistry 141, 142, 143 Biology 111, 113 *Math 201, 202	3 15 10	Sophomore Chemistry 205, 206, 207 Physics 201, 202, 203 Social Sciences (Core Requirements) Humanities Electives (Core Requirements)	12 12
Psychology 101 Physical Education	4 2	Total	48
Total	52		

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

## **PRE-PHARMACY MAJOR**

Freshman English (111, 112, 115, 140 A,B,C,D) Speech 102 Chemistry 141, 142, 143 Biology 111, 113 *Math 201, 202 Economics 101	3 15 10 10	Sophomore Chemistry 205, 206, 207 Physics 201, 202, 203 Social Sciences (Core Requirements) Physical Education Humanities (Core Requirements)	12 8 2
Total	50	Total	46

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

# PRE-PHYSICAL THERAPY MAJOR

Freshman English (111, 112, 115, 140 A,B,C,D) Chemistry 121, 122 Biology 111, 113 Biology 225 Physical Education 202 Psychology 173 Math 150 or Psychology 141  Total	8 8 10 5 4 5 4	Sophomore Biology 290, 291 (Anatomy & Physiology I, II) Speech 102 Sociology 101 Physics 201, 202 Psychology 275 Psychology 270 Humanities Elective (Core Requirements) Social Sciences	3 4 8 5
		Total	49

# PRE-VETERINARY MAJOR

Freshman English (111, 112, 115, 140 A,B,C,D) Speech 102 *Math 201, 202 Chemistry 141, 142, 143 Biology 111, 113 Zoology 225 Physical Education	Hours 8 3 10 15 10 5 2	Sophomore Chemistry 205, 206, 207 Physics 201, 202, 203 Social Sciences (Core Requirements) Humanities Elective (Core Requirements) Total	12
Total	53		

\*Math 130 sequence may be elected in preparation for calculus.

# PRE-ZOOLOGY MAJOR

Freshman English (111, 112, 115, 140 A,B,C,D) Speech 102 Chemistry 141, 142, 143 Biology 111, 112, 113 *Math 201, 202	3 15 15 10	Sophomore Chemistry 205, 206, 207 Physics 201, 202, 203 Social Sciences (Core Requirements) Biology 225 — Genetics Humanities Elective (Core Requirements)	12 12 5
Physical Education		Total	53
Total	53		

\*Math 130 sequence may be elected in preparation for calculus.







# **CONCENTRATION AREAS**

## **Social Sciences**

Business Administration Government History Pre-Law Psychology Social Work Sociology

## PRE-BUSINESS ADMINISTRATION MAJOR

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C,D)  'Social Sciences  'Math 201, 202  Economics 101, 102  Natural Sciences (Core Requirements)  Physical Education	8 10 8 12	Humanities (Core Requirements) Social Sciences Business Law 250 Accounting 101, 102 Speech 102 (Public Speaking) QM 200, 201 (Quantitative Methods) Electives	12 4 4 8 3 8
Total	48	Total	45

<sup>1</sup>Recommended: Government 101, 102

Sociology 101, 102 Psychology 101, 131 History 211, 212, or 212, 213

\*Math 130 sequence may be elected in preparation for calculus.

#### **GOVERNMENT**

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C,D)	8	Speech 102 (Public Speaking)	3
Natural Science (Core Requirements)	12	History (111, 112, 113)	12
Physical Education	2	Any three courses from the following:	15
Language 111, 112, 113		Govt. 201 (Urban Politics)	
Government 101, 102		Govt. 203 (Pol. in the American States)	
Philosophy (102 or 103)	4	Govt. 205 (Appalachian Politics)	
		Govt. 204 (Intro. to World Politics)	
Total	46	Govt. 229 (Current Pol. Topics)	
		Soc. Sci. 210 (Introduction to Urban Politics)	
		Language 212, 213, 211	12*
		Math 200 (Elem. Stat. for Soc. & Behavioral Sciences)	4
		Total	46

\*Dependent upon previous language experience and college to which the student transfers (See explanation in History Section).

#### **PRE-HISTORY MAJOR**

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, or 140 A,B,C,D)	8	Speech 102 (Public Speaking)	
Philosophy 101 (Fundamentals)	4	History 111, 112, 113 (United States)	12
History 101, 102, 103 (Western Civilization)	12	Philosophy 102 (Logic)	4
Foreign Language	12*	Foreign Language (completion of requirements)	0-12*
Natural Science (2 courses in the same area)	8	Humanities	4
Physical Education	2	Natural Science	4
		History Electives	6
Total	46		
		Total	45**

\*Depending on the school to which the student plans to transfer and depending on how many years of language the student has taken in high school, he/she may be able to complete his/her requirement by taking 0-12 credits of language during his second year. (At Ohio University, a student who has completed 4 years of the same language may complete his college-level language requirements by completing only one course. Inasmuch as that case is quite rare, it is not reflected in the above calculations.)
\*\*This calculation is premised on the assumption that the student will need to take 12 hours of language in his Sophomore year. Should this not be the case (as discussed above), then it is recommended that the student fill out the remaining hours in courses drawn from the social sciences, particularly government and sociology.

#### **PRE-LAW MAJOR**

Freshman         English (111, 112, 113, 115, 140 A,B,C,D)         Philosophy 102 (Logic), 103 (Moral)         Language 111, 112, 113	8	Sophomore History 111, 112, 113 Economics 101, 102 Psychology 101 (lotted stice)	8
Lab Science (2 quarter sequence)  Government 101, 102  Speech 102 (Public Speaking)	8 8	Psychology 101 (Introduction) Language 211, 212, 213 Math 200 (Elem. Stat. for Soc. & Behav. Science) Physical Education	12* 4 2
Total	47	Electives	

<sup>\*</sup>Dependent upon previous language experience and college to which the student transfers (See explanation in History Section).

## PRE-PSYCHOLOGY MAJOR

Freshman English (111, 112, 115, 140 A,B,C,D) Humanities Natural Sciences (Core Requirements — Biology 111, 120 recommended) Language 112, 113, 111 Psychology 101 Math 150 (Elem. Stat. for Soc. & Behav. Science)	8 8 8 12 12* 4	Sophomore  Speech 102 (Public Speaking) Philosophy Language 211, 212, 213 Sociology 101 (Prin. of Sociology) Sociology 210 (Current Social Problems) P.E. or Health Psychology (Electives)	4 12* 4 4 2-4
Total	48	Total	45

\*Dependent upon previous language experience and college to which the student transfers (See explanation in History Section).

## PRE-SOCIAL WORK MAJOR

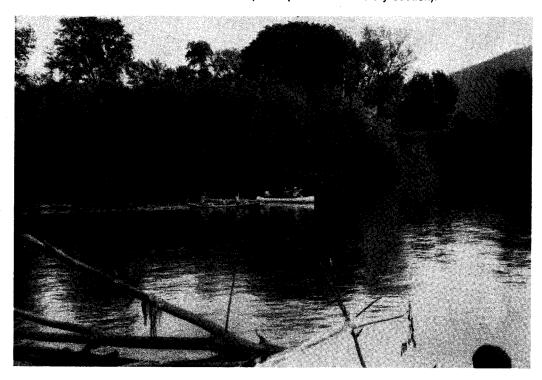
Freshman	Hours	Sophomore	Hours
	R	Speech 102 (Public Speaking)	3
English (111, 112, 115, 140 A,B,C,D)	4	Math 200 (Elem. Stat. for Soc. & Behav. Science)	4
Psychology 101 (General Psychology)	4		Ω
Psychology 173 (Child and Adolescent)	4	Economics 101, 102	4
Sociology 101 (Principles of Sociology)	4	Anthropology 201	4
Natural Sciences (Core Requirements — Biology 111, 120		Sociology 202 (Intro. to Family Sociology)	4
recommended)	12	Government 201 (orban 1 ontics) of	4-5
Government (101 or 102)	4	205 (Appalachian Politics)	' I
Philosophy 102 (Moral Philosophy)		Humanities (Core Requirements)	8
Physical Education		Electives (Social Sciences)	9-10
Electives		Total	45
Total	46		

\*Language Requirement dependent upon school to which student transfers.

## PRE-SOCIOLOGY MAJOR

Freshman	Hours	Sophomore	
English (111, 112, 115, 140 A,B,C,D)  Humanities (Core Requirements)  Natural Sciences (Core Requirements — Biology 111, 120 recommended)  Language 111, 112, 113	8 12 12*	Speech 102 Language (211, 212, 213) Humanities (Core Requirements) Math 200 (Elem. Stat. for Soc. & Behav. Sciences) Psychology 101	12* 4 4
Sociology 101 (Principles of Sociology)  Physical Education	2	Anthropology 201	5
Total	46	Total	45

\*Dependent upon previous language experience and college to which the student transfers (see explanation in History Section).



# **BUSINESS TECHNOLOGIES**

(ASSOCIATE OF APPLIED BUSINESS DEGREE)

Accounting

Banking & Finance

Data Processing and Computer Programming

Executive Secretarial

Retail Marketing Management

## **ACCOUNTING TECHNOLOGY**

Accounting Technology is designed to give the student a strong background in accounting concepts and principles and experiences in the application of the theory he learns. Emphasis will be placed on the use of modern electronic accounting and calculating machines. The accounting student will be taught to apply his accounting skills in the field of data processing and computers. Students who complete the course work for this technology will receive an Associate Degree in Applied Business.

#### **Job Opportunities**

Positions available in Accounting Technology:

ACCOUNTANT, MACHINE PROCESSING — Coordinates mechanized accounting operations and confers with management and

other department heads to adapt accounting and other record-keeping systems to machine accounting processes.

ACCOUNTING CLERK — Accountant who verifies additions, performs audits, postings, and vouchers, analyzes accounts, and prepares statements, etc.

ACCOUNTANT — Applies principles of accounting to install and maintain operations of general accounting system.

A graduate may gain employment in government agencies, public accounting, business and industry, as industrial accountants, public accountants or bookkeepers for universities, foundations, schools and other institutions.

#### **ACCOUNTING TECHNOLOGY CURRICULUM**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	_	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Soci 0101	Principles of Sociology	G	5	0	4
ExST 0101	Typing I	T	2	4	3	BusL 0250	Business Law I	В	4	0	3
ExST 0120	Business Machines	T	2 2	4 3 4	3	Acct 0211	Inter. Accounting I	T	3 5	4 0	4
Acct 0101	Accounting I	T	. 3		4	Psyc 0101	Principles of Psychology	G		0	4
Math 0105	Business Math	В	5	0	4	Acct 0242	Business Communications	G	3	2	3
			_	_	_				_	_	_
			17	11	18				20	6	18
	SECOND QUARTER						FIFTH QUARTER				
Engl 0112	Contemp. Writing Skills II	G	5	0	4	Econ 0101	Principles of Economics I	В	5	0	4
Engl 0112 EDPT 0102	Intro. to Data Processing	Ť	2		3	Spch 0101	Speech	G	3	0	3
Math 0101	Basic Algebra	В	5 2 5	3 0 0 4	4	Acct 0212	Inter. Accounting II	Т	3 3	4	4
RMMT 0301		В	4	ŏ	4	Acct 0221	Cost Accounting I	T	3	3	4
Acct 0102	Accounting II	Ť	3	4	4	Acct 0205	Principles of Finance	Т	3	0	3
					_					7	10
			19	7	19				. 17	/	18
	THIRD QUARTER						SIXTH QUARTER				
Engl 0115	Comp. & Mass. Comm.	G	5	0	4	RMMT 0302	Personnel Management	Ţ	3	0	3
Acct 0103	Accounting III	G T		4	4	Econ 0102	Principles of Economics II	В	5	0	4
EDPT 0104	Computer Fund. & Proc.	Ť	3 2	4	3	Acct 0241	Auditing	Т	2	4	3
Acct 0104	Tax Accounting	Ť	3	4 3 0	4	Acct 0222	Cost Accounting II	Т		3	4
RMMT 0101	Intro. to Business	В	4	0	3	Acct 0213	Inter. Accounting III	T	3	3	4
			_	_						_	_
			17	11	18				16	10	18

## **BANKING AND FINANCE TECHNOLOGY**

The Banking and Finance Technology Program is designed to provide the individual with a background that will have many opportunities to broaden his knowledge and skills once he is working in a bank or consumer finance company. The student will have an opportunity to participate in a management training program in which the candidate is exposed to the various aspects of financial institutions and operations to which management thinks he may be eventually suited as a potential supervisor, manager or officer. There are courses in Accounting Principles, Money and Banking, Economics, Business Law, Investments, Bank Organization, etc. Students with a background of these courses are needed to staff their fast-growing operations.

#### **Job Opportunities**

Graduates will find employment as an assistant to the credit analyst, trust officer, supervisor of financial services, businessman's advisor, comptroller, or any of the many senior officers employed in the various banks and financial institutions.

There is a wide range of jobs from which a two-year college graduate can choose. Banks need people to work in their commercial loan department where all types of businesses are advised as to the types of financing available.

#### **BANKING AND FINANCE CURRICULUM**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Engl 0121	Technical Writing I	G	3	0	3
Math 0105	Business Math	В	5 5	0	4	Econ 0101	Economics I	В		_	
BusL 0250	Business Law I	В	5		4	Psyc 0132	Human Behavior	В	5 3 2	0 0 3	4 3 3
BaFT 0101	Prin. of Banking & Finance I	T	3	0 2 3	3	BaFT 0201	Residential Appraising	Ť	2	3	3
Acct 0101	Accounting I	В	2	3	3	BaFT 0202	Home Mortgage Lending	Ť	3	3	4
			 20	<u> </u>	 18					_	_
			20	J	10				16	6	17
	SECOND QUARTER						FIFTH QUARTER				
Engl 0112	Contemp. Writing Skills II	G	5	0	4	Psvc 0101	Principles of Psychology	G	5	0	4
Acct 0102	Accounting II	В	2	3	3	Spch 0101	Speech I	Ğ	5 3	ŏ	3
BusL 0260	Business Law II	В	2 5 5	0	4	Econ 0102	Economics II	B	5		4
RMMT 0227	Credit and Collections	Т		0	4	BaFT 0203	Valuation of Real Estate	Ť	2	3	4 3
BaFT 0102	Prin. of Banking & Finance II	T	2	3	3	BaFT 0204	Investments I	Ť	5	0 3 0	4
			 19	6	18				 20	_ 3	— 18
									20	Ū	
	THIRD QUARTER						SIXTH QUARTER				
Engl 0115	Comp. & Mass. Com.	G	5 2 2 2	0	4	Soci 0101	Principles of Sociology	G	5	0	4
BaFT 0103	Fund. of Data Processing	T	2	3 3 0	3	BaFT 0205	Personnel Management	T		0	3
Acct 0103	Accounting III	T	2	3	3	BaFT 0206	Investments II	T	3 5 2	0 0 3	4
BaFT 0104	Insurance I	T		0	2	BaFT 0207	Mortgage Loan Servicing	Т		3	4 3 3
BaFT 0105	Installment Credit	Ţ	4	0 3	3	BaFT 0208	Supv. of Personnel Admin.	T	3	0	3
BaFT 0106	Prin. of Bank Operations	Т	2	3	3	BaFT 0209	Seminar in Consumer				
			4-	_			Finance	, T	0	4	1
			17	9	18					_	_
									18	7	18

## DATA PROCESSING AND COMPUTER TECHNOLOGY

The Data Processing and Computer Technology Associate Degree Program at Shawnee State General and Technical College is designed to meet the manpower demand of industries, government, and educational institutions. In addition to theoretical fundamentals, practical aspects of data processing are emphasized. Hands-on opportunity is provided and encouraged. Graduates of this program will be fully prepared to enter employment as staff members (computer programmers or operators) in computer installations and application departments or enroll in a four-year program as a fully accredited junior. Graduates of this technology receive an associate degree in Applied Business.

#### **Job Opportunities**

PROGRAMMER — Works closely with systems analysts to define problems, analyze the input data and output report requirements, and prepare a program of instructions which the computer can follow to solve the problem.

SYSTEMS ANALYST — Develops ordered methods for data collection, processing, and reporting.

DATA PROCESSING MANAGER — Plans, coordinates and directs all data processing activities for organization; supervises computer center and punched card installations.

Other positions are available to the graduate technician after several years of experience.

### DATA PROCESSING AND COMPUTER TECHNOLOGY CURRICULUM

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Engl 0121	Technical Writing I	G	3	0	3
Acct 0101	Accounting I		3		3	Soci 0101	Principles of Sociology	G	5	0	4
Math 0111	Data Math I	В	3 5	2 0 0	4	BusL 0250	Business Law I	В	4	0	3
RMMT 0101	Intro. to Business	B B B T	4	0	3	EDPT 0241	Systems Acct., Data		_	_	_
EDPT 0101	Intro. to Data Processing	Т	3	5	4		Processing Applications	Ţ	3	2	3
	<b>.</b>		_		_	EDPT 0221	Systems Program. & Lab I	Т	3	6	5
			20	7	18				_	_	
									18	8	18
	SECOND QUARTER						FIFTH OHADTED				
Engl 0112	Contemp. Writing Skills II	G	5	. 0	4		FIFTH QUARTER	_	_	_	
Acct 0102	Accounting II	В	5 3 5	2 0 5	3	EDPT 0231	Systems Analysis	<u> </u>	3	3	4
Math 0112	Data Math II	В	5	0	4	EDPT 0222	Systems Program. & Lab II	Ţ	3	9	6
EDPT 0111	Computer Fundamentals I	Т	3 3	5	4	RMMT 0301		В	4	0	4
Spch 0101	Speech I	G	3	0	3	Econ 0101	Prin. of Economics I	В	5	U	4
				_					<u> </u>	12	18
			19	7	18				15	12	10
	THIRD QUARTER						SIXTH QUARTER				
Engl 0115	Comp. & Mass. Comm.	G	5	0	4	Spch 0102	Speech II	G	3	0	3
Engl 0115 Acct 0251	Systems Accounting	Ť	3		3	EDPT 0223	Advanced Programming	T	3	6	5
Math 0106	Business Statistics	В	3 4	ō	4	Psyc 0101	Principles of Psychology	G	5	0	4
EDPT 0112	Computer Fundamentals II	B T	3	2 0 5	4	EDPT 0251	Case Study-Computer				
EDPT 0103	Basic Computer Concepts	Ť	3 2	3	3		Systems	Т	3	6	5
		•	_	_	_						
			17	10	18				14	12	17

\*Students who are planning to continue their education toward a four-year degree should have three additional Math classes — Data Math III, Calculus I, and Calculus II.

### **EXECUTIVE SECRETARIAL TECHNOLOGY**

Secretaries are essential to business, industry, government, and the professions.

The demand for good secretaries far exceeds the supply; thus, the education in this field provides many opportunities to work in pleasant, attractive surroundings performing interesting tasks for appreciative people.

As the name of the program implies, the executive secretary must have all the usual secretarial skills plus the ability to make decisions and aid in the implementation of management plans and policies. The basic secretarial skills are learned in the classroom and laboratories of the Technical College under the tutelage of competent instructors. The same instructors, experienced in business and industry, help develop the insight, knowledge, and skills necessary for the smooth and effective operations of office management.

A student completing all the course work for this program receives an Associate degree in Applied Business.

#### **Job Opportunities**

Positions available after completion of the Executive Secretarial Technology are:

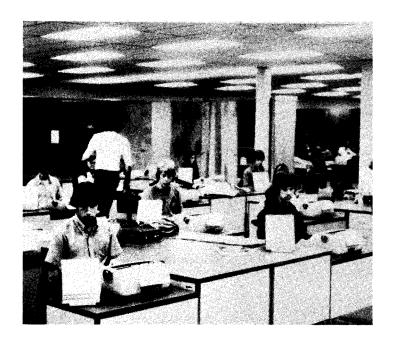
LEGAL SECRETARY — Prepares legal papers and correspondence of legal nature, such as summonses, complaints, motions, and subpoenas. Takes dictation in legal terminology.

MEDICAL SECRETARY — Prepares medical charts and reports for doctors or hospital personnel, utilizing knowledge of medical terminology. Takes dictation in medical terminology.

**EXECUTIVE** SECRETARY — Has a high degree of stenographic speed and accuracy. Responsible for supervision of other clerical personnel. Usually handles all types of correspondence and handles private and confidential reports.

ADMINISTRATIVE SECRETARY — Keeps official corporative records and executes administrative policies determined by or in conjunction with other officials. Prepares memorandums outlining and explaining administrative procedures and policies to supervising workers.

There are advancement possibilities after several years of experience. The secretarial technician can advance to the highest position in the secretarial field. She serves as an administrator of the entire clerical department of an organization, or as the private secretary to the president of a corporation.



# **EXECUTIVE SECRETARIAL CURRICULUM**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FIFTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Econ 0101	Prin. of Economics I	В	5	0	4
Math 0105	Business Mathematics I	В	5	0	4	Spch 0101	Speech I	G	3	0	3
Acct 0101	Acct I	В	3	4	4	ExST 0242	Secretarial Practices II	T	3	2	3
ExST 0101	Typing I	Т	2	3	3	Soci 0101	Sociology	G	5 5	0	4 4
ExST 0111	Shorthand I	Т	3	2	3	Psyc 0101	Prin. of Psychology	В	5	U	4
				_		ExST 0215	Adv. Shorthand Speed	т	0	5	1
			18	9	18		Building	'	_	_	
	SECOND QUARTER								21	7	19
Engl 0112	Contemp. Writing Skills II	G	5	0	4		SIXTH QUARTER				
ExŠT 0120	Business Machines I	Ť	2	3	3		•	_	-		
Acct 0102	Accounting II	В	3	4	4	Econ 0102	Prin. of Economics II	B T	5 3	0	4 3
ExST 0102	Typing II	T	2	3	3	RMMT 0302	Personnel Management	ı	3	U	3
ExST 0112	Shorthand II	τ	3	2	3	IDLOOK DO	OGRAM — CLASSROOM				
			 15	12	 17			-	0	15	5
			15	12	17	ExST 0243	Secretarial Practices III Expert Shorthand	T T	3	2	3
	THIRD QUARTER					ExST 0216 ExST 0223	Expert Snorthand  Expert Transcription	÷	3	2	3
Engl 0115	Comp. & Mass. Comm.	G	5	0	4	EXOT OFF	Export Transcription		_		_
ExST 0121	Business Machines II	Ť	2	3	- 3				14	19	18
ExST 0221	Dictation & Transcription I	Т	3	2	3						
ExST 0103	Typing III	Т	2	3	3	*BLOCK PR	OGRAM — ON THE JOB				
ExST 0113	Shorthand III	Т	3	2	- 3	ExST 0244	Secretarial Practices IV	Τ -	0	25	7
ExST 0231	Records Management	Т	3	0	3					_	_
			— 18	10	19						14
						*The stud	ent may take either Sec 24	3 or Sec	244, bu	t his e	choice
	FOURTH QUARTER			_	_	must be app	proved by his advisor.				
RMMT 0101	Intro. to Business	В	4	0	3						
BusL 0250	Business Law I	В	4	0	3						
EDPT 0102	Intro. to Data Processing	T T	2	3 2 2 2	3 3						
ExST 0222	Dict. & Transc. II	+ +	3	2	3						
ExST 0214	Shorthand IV Secretarial Practices I	Ť	3	2	3						
ExST 0241	Secretarial Fractices i	•	_	_	_						
			19	9	18						
•			. •	-							

# RETAIL MARKETING MANAGEMENT TECHNOLOGY

Retailing is the last link in the chain that reaches from the producer or manufacturer to the consumer. It is so closely related to the entire business community that it readily provides an accurate index for judging the health of the economy. The retailer provides an outlet for merchandise and customer services. He is responsible for presenting new articles that may create a new market, as well as being responsible for supplying customer needs.

The retailing industry is particularly attractive because of the variety in the types of work performed by middle managers. Buying, stock control, stock storage, promotion, marketing, accounting, personal management, and legal procedures for retailing are among the many functions a retail mid-manager performs. As advancement occurs, the mid-manager increases his responsibility and authority to become an important part of the management team. In multi-unit companies, he may become the manager of a branch organization. He is constantly working with people inside and outside his company to ensure constant development of both sales and profits.





#### **Job Opportunities**

Positions available in retail mid-management technology:

DEPARTMENT MANAGER — Supervises and coordinates activities of workers in department stores and chain stores. Schedules work hours and assigns duties of workers. Orders merchandise, supplies, and equipment.

BUYER — Purchases merchandise for resale; selects and orders merchandise from showings of manufacturing representatives, basing selection on nature of clientele, demand for specific merchandise, and experience as buyer.

ASSISTANT BUYER — Verifies quantity and quality of stock received from manufacturer. Authorizes payment of invoices or return of shipment. Approves advertising copy for newspaper.

STORE MANAGER — Manages retail store, performing following duties personally or through subordinates: hires, trains and discharges employees, plans work schedule and supervises workers to ensure efficient and productive performance of job.

TRAFFIC MANAGER — Sees to it that all merchandise reaches the store by the most efficient routing and carrier services; that its receipts are recorded and the records dispatched to the buyer and the inventory control department.

Positions available to the graduate after several years of experience are: district manager, merchandise manager, assistant store manager, personnel manager, recruiter, and manager of a large store.

# **RETAIL MARKETING MANAGEMENT CURRICULUM**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
÷	FIRST QUARTER						FIFTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Soci 0101	Prin. of Sociology	G	5	0	4
Math 0105	Business Math	B	5	0	4	RMMT 0225	Retail Case Studies	Ť	3	2	3
Acct 0101	Accounting I	В	5 5 3	4	4	Engl 0122	Technical Writing I	Ġ	5 3 5	2 0	4
RMMT 0101	Intro. to Business	Т	4	0	3	BusL 0250	Business Law I	В	4	Ō	3
EDPT 0102	Intro. to Data Processing	T	2	3	3		Sales Promotion	Ť	3	0 2	3
			— 19	7	— 19				_	_	
			19	′	19				20	4	17
	SECOND QUARTER						SIXTH QUARTER				
Engl 0112	Contemp. Writing Skills II	G	5	0	4	Psyc 0101	Prin. of Psychology	G	5	0	4
RMMT 0102	Marketing	T	5		4	BusL 0260	Business Law II	B	4	ŏ	3
Acct 0102	Accounting II	T	5 5 3 3 5	0 4	4	RMMT 0227	Credit and Collection	Т	4 5	Ō	4
Spch 0101	Speech I	G	3	0	3	RMMT 0301	Prin. of Management	Т	4	0	4
Econ 0101	Prin. of Economics I	В	5	0	4	Spch 0102	Speech II	G	3	0	3
			_	-					_	_	_
			21	4	19				21	0	18
	THIRD QUARTER						SEVENTH QUARTER				
RMMT 0240	Retail Accounting	Т	2	3	3	Math 0106	Business Statistics	В	4	0	4
Engl 0115	Comp. & Mass. Com.	Ġ	5	ō	4	RMMT 0302	Personnel Management	Ť	3	ő	3
Econ 0102	Prin. of Economics II	В	2 5 5 5	0	4	RMMT 0223	Retail Buying	Ť	4	Ŏ	4
	Intro. to Retailing	T	5	Ó	4	Psyc 0132	Human Behavior	Ġ	3	0	3
	Salesmanship	Т	3	2	3	RMMT 0235	Advertising	Ť	3	2	3
			_	_	_				_	_	
			20	5	18				17	2	17
	FOURTH QUARTER										
RMMT 0310	Retail Internship	Т	0	40	6						
	Spec. Prob. in Retailing	Ť	2	Ô	2						
	Elective	•	_	•	4						
	—·····································		_	_							
			2	40	12						

# **ALLIED HEALTH TECHNOLOGIES**

(ASSOCIATE OF APPLIED SCIENCE DEGREE)

Associate Degree Nursing

Dental Hygiene

Medical Laboratory

Radiologic Technology

# **CERTIFICATE PROGRAMS**

(One Year)

Emergency Medical Technician — Paramedic
Respiratory Therapy Technician
Practical Nursing

# ALLIED HEALTH TECHNOLOGIES ADMISSION PROCEDURES

## Dental Hygiene Medical Laboratory

**EMT - Paramedic** 

Radiologic Technology Respiratory Therapy

- Student completes the application and sends it to Shawnee State College, P.O. Box 790, Portsmouth, Ohio 45662; a fee of \$10 which is non-refundable should accompany the completed application.
- Student completes the transcript request form and gives it to his high school counselor. The high school counselor will then forward the transcript to the college. Also, transcripts of previous college work should be sent to the college.
- Student has two persons (who are not relatives) send a letter of recommendation to Shawnee. State College. These letters should be sent to the appropriate program director, P.O. Box 790, Portsmouth, OH 45662
- 4. Student writes a brief description of his abilities and background, including outstanding accomplishments, and explains why he wants to take the program. This should not exceed three typewritten pages. The College would appreciate receiving a recent picture with the description. Both should be sent to the appropriate program director, P.O. Box 790, Portsmouth, OH 45662.
- Student takes the American College Test (ACT) and has scores forwarded to the College. Other tests may be required depending on program.
- Student is interviewed by a member of Student Services and Program Director.
- Completion of Physical Examination is required by the College. (Consult the Program Director for more information concerning the Physical Examination)

- 8. Student should meet the following requirements to be eligible for the program. The applicant should have:
  - (a) High school average of at least 2.5 on a 4.0 scale.
  - (b) Completed algebra, biology, and chemistry (high school physics would also be helpful for the Respiratory Therapy Program).
  - (c) A natural science score of 15 or more on the ACT.
  - (d) Satisfactory health (physical examination required).
  - (e) If the student meets the above criteria, then an interview with the selection panel is scheduled. Each of the above Allied Health Programs can accept only a limited number of students, therefore, a rating system will be utilized to make final determination of placement in the program. This rating system will take into account the high school average; average grades in algebra, biology, and chemistry; ACT scores; the letters of recommendation; and the panel interview. If all qualified students are not admitted to the class, then an alternate list will be established. Alternates will be admitted if one or more of the original group is unable to enroll.
- 9. Once a student has been officially admitted to any of the above Allied Health Programs, he has until May 1 or no later than one month after final acceptance to make a deposit of \$100 on the first quarter's tuition. If the student is applying for financial aid, other arrangements are possible. However, it is the student's responsibility to either pay the \$100 or make other arrangements with the Dean of Student Services before May 1. If he has done neither of the above, his name will be dropped from the list and an alternate taken into the program.
- 10. When officially admitted, the applicant will purchase the appropriate uniform and Professional Liability Insurance.

# **DENTAL HYGIENE**

Working under the supervision of a dentist, the dental hygienist checks and cleans teeth, charts tooth conditions, takes radiographs, applies fluoride, imparts dental health information, sterilizes instruments, and performs other chairside and office duties. Upon successful completion of this two-year program, the student is eligible to take a licensing examination prescribed by the board of dental examiners of the state in which she chooses to practice.

#### Accreditation

The Dental Hygiene Program is accredited by the American Dental Association and the Ohio Dental Board.

#### **Job Opportunities**

Dental hygienists practice in the following areas:

FOR DENTISTS IN PRIVATE PRACTICES

SCHOOL SYSTEMS — Primarily concerned with the proper care of children's teeth. Inspect students' teeth and report findings to a supervising dentist. May also instruct students in proper care of teeth, give demonstrations of the proper use of a toothbrush, and present talks on nutrition and its effects on dental health.

PUBLIC HEALTH WORK OR PRIVATE WELFARE AGENCIES — Performs duties similar to those of the school hygienist. However, they work mainly with adults.

INDUSTRY OR UNION-SPONSORED CLINICS — Give regular dental service to plant employees, providing such care as examining and cleaning teeth and charting cavities.

HOSPITALS AND CLINICS — Concerned primarily with the special oral health problems of the bedridden and chronically ill.

Hygienists with advanced degrees may be employed in research or may teach in dental hygiene educational programs that help students to prepare for the profession.

# **DENTAL HYGIENE CURRICULUM**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	DtHy 0125	Clinical Dental Hygiene V	Т	1	12	5
DtHy 0111	Head & Neck Anatomy I	B	2	Ō	2	DtHy 0201	General and Oral Pathology	Т	3	0	3
		В	3	3	4	DtHy 0202	Periodontics	Ţ	3	0	3
DtHy 0121	Clinical Dental Hygiene I	T	2	6	4	DtHy 0203	Nutrition	T	3	0	3
Biol 0290	Anatomy & Physiology I	В	3	3	4	Soci 0101	Sociology	G	5	0	4
DtHy 0113	Tooth Morphology I	Т	0	3	1				15	12	— 18
			15	15	<u> </u>						
			. •	. •			FIFTH QUARTER				
	SECOND QUARTER					DtHy 0126	Clinical Dental Hygiene VI	Т	1	12	5
Engl 0112	Cont. Writing Skills II	G	5	0	4	DtHy 0204	Pharm. & Anesthesiology	В	4	0	4
DtHy 0112	Head & Neck Anatomy II	В	2	0	2	DtHy 0205		T	3	0	3
Chem 0122	Organic Chemistry	В	2 3	3 6	4	DtHy 0206	Public Health	T	3	0	3
DtHy 0122	Clinical Dental Hygiene II	Т	2	6	4					_	— 15
Biol 0291	Anatomy & Physiology II	В	3	3	4				11	12	15
DtHy 0114	Tooth Morphology II	T	0	3	1		SIXTH QUARTER				
				15	— 19	D415. 0407	= '	Т	4	12	5
			15	15	19	DtHy 0127 Psyc 0101	Clinical Dental Hygiene VII Principles of Psychology	Ġ	1 5	0	5 4
	THIRD QUARTER					Psyc Oloi	Electives	u	3	Ū	3
Engl 0115	Comp. & Mass. Comp.	G	5	0	4				_	_	_
Engl 0115 Biol 0235	Microbiology	G B T	5 3 2 1	0 3 3 8	4				6	12	12
DtHy 0101	Radiology	Ť	2	3	3						
DtHy 0123	Clinical Dental Hygiene III	Ť	1	8	4	After the f	irst quarter courses, all subse	equent	basic ar	nd tec	hnical
DtHy 0102	General & Oral Histology					courses are	closely related and, therefore	, must be	e taken i	n sequ	uential
,	and Embryology	T.	3	0	3	order.					
			14	14	18	Please No	te: Only those students that he into the program or receive	d progra	am direc	torap	proval
	SUMMER QUARTER						may take the courses begi	nning w	ith the l	HY	pretix.
DtHy 0124	Clinical Dental Hygiene IV	Т	2	12	6						
DtHy 0103	Dental Materials	Ť	3	6	5						
Spch 0101	Speech	G	3	0	3						
			8	— 18	14						

# MEDICAL LABORATORY TECHNOLOGY

The exciting and newest member of the Medical Laboratory team is the Medical Laboratory Technician; an individual who performs, efficiently and dependably, rather complicated laboratory procedures in areas of Hematology, Serology, Blood Bank, Chemistry, Microbiology, and other areas pertinent to the Clinical Laboratory upon graduation. He develops valuable data to be utilized by qualified physicians in determining the presence, as well as the implications pertaining to the cause of disease. Specific tasks required of those enrolled in this technology include collecting of blood samples, analysis of the constituents of blood and body fluids, preparation and staining slides for cellular and chemical components, concentration of specimens for parasitological study, microscopic examinations of blood, urine and other body fluids, and blood grouping.

The laboratory procedures are implemented in both the teaching laboratory on the campus and the affiliated hospital laboratories, focusing upon basic skills, the understanding of principles, and the mastering of laboratory procedures.

#### Accreditation

Accredited by the American Medical Association, Council on Medical Education in collaboration with the American Society of Clinical Pathologists (AMA/CME, ASCP).

#### **Job Opportunities**

Graduates will qualify for employment opportunities in hospital Laboratories, independent Laboratories, clinics, research institutes, public health facilities, industrial or pharmaceutical Laboratories, and environmental Laboratories.

The technician upon graduation and employment acceptance, may find a tendency to specialize in blood banking, hematology, special chemistry, research and development, or quality control programs.

In addition to the geographic location of the employment, salaries are commensurate with ability, motivation, and knowledge of clinical laboratory.

#### Certification

Graduates of the program qualify to write the National Registry Examinations to become certified as MLT (ASCP).



# MEDICAL LABORATORY CURRICULUM

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
							FIFTH QUARTER				
	FIRST QUARTER					Soci 0101	Sociology or Elective*	G	4	0	4
Engl 0111	Contemp. Writing I	G.	5	0	4	MLTc 0211	Clinical Chemistry I	T	2	6	4
	or Elective*	В	5	ŏ	4		Hematology II	Ţ	2	6	-4 1
Math 0108	Allied Health Math I Inorganic Chemistry	В	3	3	4		Parasitology	Ţ	1	2	4
	Anatomy & Physiology I	В	3	3	4	MLTc 0102	Medical Microbiology	. T	3	3	_
Biol 0290	Anatomy & Thysiology	_	_	_					12	17	17
			16	6	16					• •	
							SIXTH QUARTER				
	SECOND QUARTER					MLTc 0212	Clinical Chemistry II	Т	2	6	4
Engi 0112	Contemp. Writing II	_	-	0	4	MLTc 0202		Т	3	3 6	4
	or Elective*	G	5 5	0	4	MLTc 0203		Т	2	6	4
Math 0109	Allied Health Math II	B B	3	3	4	MLTc 0220		Т	1	0	1
Chem 0122	Organic Chemistry	• В	3	3	4	MLTc 0214		T	1	2	1
Biol 0291	Anatomy & Physiology II	ь	_	_			,		_	17	— 14
			16	6	16				9	17	14
							SEVENTH & EIGHTH				
	THIRD QUARTER			3	4		QUARTERS				
	Biochemistry	B B	3 3	3		MI To 0204	Internship	Т	0	40	13
Biol 0235	Microbiology	T D	2	6	4		Special Problems	Т	2	0	2
MLTc 0120		÷	2	3	3	WILTO OZOO	Opolia. Trouve				_
MLTc 0201	Urinalysis	Ť	1	2	. 1				2	40	15
MLTC 0111	Med. Tech. Orientation		· <u> </u>	_	_		m It I I I I I I I I I I I I I I I I I I	Capial Stu	ıdias		
			11	17	16	*Electives i	n English, Humanities and	Social Sit	<i>a</i> a163.		
						Degree Re	quirements:				_
	FOURTH QUARTER			_	_	Students	will receive an Associate	of Appli	ied Scie	ence	Degree
Engl 0121	Technical Writing	G	4	0		/AAC\	a aradustion. In order to al	ality for t	ne aegr	ee, a s	student
Psych 010	Psychology or Elective*	G	5 3	0		must comp	Jote a minimum of 104 duar	ter creatt r	iours in	the to	nowing
Spch 0101	Speech I or Elective*	G	3	C	3	areas: Com	munications, Natural Scien	ices, Huma	anities a	na re	Citilicai
•			12	_	10	Courses.					
				•		Please No	te: Only those students tha into the program or rece may take the courses b	ivea proal	ramioire	CLUI a	ppiovai

# RADIOLOGIC TECHNOLOGY

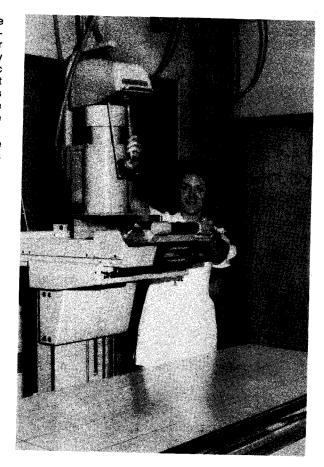
The Radiologic (X-Ray) Technology curriculum will prepare the graduate as a Radiologic Technologist. The Radiologic Technologist works under the supervision of a medical radiologist or physician in hospital x-ray departments, clinics, commercial x-ray laboratories, or doctors' offices. The responsibility of the Radiologic Technologist is to produce radiographic (X-Ray) film of the highest diagnostic quality of any designated area of the human body. It is from this film that the radiologist makes his interpretation. The technologist also works in the x-ray therapy section assisting the radiologist in the administration of radio-therapy.

Curriculum for this program covers eight academic quarters. The first four academic quarters are designed to provide the students with mathematics, basic science, general education courses, auxiliary or supporting technical courses, and specialized technical courses in Radiologic Technology.

The second year of the program consists of internship in hospitals, with specialized courses taught by the hospital staff.

Experience in the radiology departments of the cooperating hospitals provides the opportunities for the practical application of knowledge learned in the college classroom. This training is a vital part of the program, since it enables the student to observe and assist in the handling of sick and injured patients as they undergo a wide variety of radiographic examinations.

Upon satisfactory completion of the course requirements, the graduate will receive the Associate in Applied Science Degree and is eligible to apply for examination by the American Registry of Radiologic Technology.



# RADIOLOGIC (X-RAY) CURRICULUM

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FIFTH QUARTER				
	Basic Patient Care	Т	3	3	4	RdIT 0105	Radiologic Technology V	T	4	0	4
RdIT 0200	Radiologic Technology	τ̈́	2	2	2	RdIT 0211	Practicum I	Т	0	32	6
RdIT 0101 Biol 0290	Anatomy & Physiology I	B	2 3	2 3	4	RdIT 0221	Seminar I	Т	2	0	2
Math 0108	Allied Health Math I	В	5	0	4				_		12
Engl 0111	Contemp. Writing Skills I	G	5	0	4				6	32	12
-			18	_ 8	18		SIXTH QUARTER				
			.0	·		RdIT 0106	Radiologic Technology VI	Т	4	0	4
	SECOND QUARTER					RdIT 0212	Practicum II	T	0	32	6
RdIT 0102	Radiologic Technology II	Т	2	2	2	<b>RdIT 0222</b>	Seminar II	T	2	0	2
RdIT 0102	Radiographic Exposure I	Ť	3	2 2 3 3	3				_	_	_
Biol 0291	Anatomy & Physiology II	В	3	3	4				6	32	12
Phys 0201	Physics I (Mechanics)	В	3	3	4		OFWENTH OHARTED				
Engl 0112	Contemp. Writing Skills II	G	5	0	4		SEVENTH QUARTER	_		0	4
			<u> </u>	10	<u> </u>	RdIT 0107	Radiologic Technology VII	T T	4 0	32	4 6
			10	10	17	RdIT 0213 RdIT 0223	Practicum III Seminar III	÷	2	0	2
	THIRD QUARTER					Null 0223	Seminar iii	•	_	_	_
RdIT 0103	Radiologic Technology III	Т	2	3	3				6	32	12
Phys 0202	Physics II (Heat, Light, Sound	_	2 3	3 3 3	3						
Chem 0121		В	3	3	4		EIGHTH QUARTER			_	
Spch 0101	Speech I	G	3	0	3	RdIT 0108	Radiologic Technology VIII	Ţ	4	0	4
Engl 0115	Composition & Mass					RdIT 0214		T T	0	32 0	6 2
Ū	Communication	G	5	0	4	RdIT 0224	Seminar IV	1		_	_
			16	9	18				6	32	12
	FOURTH QUARTER					NOTE: Ho	spital laboratory experience co	onsisting	g of eigh	nt (8) c	ontact
RdIT 0104	Radiologic Technology IV	Т	2	3	3	hou	urs per week is required of a	II stude	nts in tl	ne firs	t year.
RdIT 0111	Physics (Radiologic)	Т	3	3	4	Place No	te: Only those students that h	ave bee	n officia	ally ac	cepted
Psyc 0101	Principles of Psychology	G	5	0		riease NO	into the program or receive	a proar	am dired	ztor ap	provai
Soci 0101	Principles of Sociology	G	5 3	0	4		may take the courses beg	inning v	vith the	RDLT	prefix.
Engl 0121	Technical Writing	G	3	0	3		,				
			18	6	18						
			10	U							

# RESPIRATORY THERAPY TECHNICIAN

Respiratory Therapy is an allied health specialty concerned with the treatment, management, control, diagnostic evaluation, and care of patients with deficiencies and abnormalities associated with the cardiopulmonary system. The respiratory technician must be expert in the therapeutic use of such aids to the breathing process as medical gases, oxygen administration, humidification, aerosols, positive pressure ventilation, chest physiotherapy, cardiopulmonary resuscitation, and mechanical airways.

It is the responsibility of the respiratory technician to follow specific instructions from the physician. To do this effectively, he must understand the physical and psychological needs of the patient, the doctor's goal in using respiratory therapy, and where and how the specialist's equipment and knowhow fit into the treatment picture. The complexity of this responsibility requires the services of a highly trained, dedicated technician.

Shawnee State College has a program to help prepare students to meet the requirements for qualified, competent respiratory technicians. Theory and academic studies are presented in classroom and laboratory setting at Shawnee State. Students then gain clinical experience and practice theory by working in various area hospitals under the supervision of qualified instructors. Upon completion of the program and one year of work experience as a respiratory therapy technician, the graduates are eligible to take the national certification examination.

#### Job Opportunities

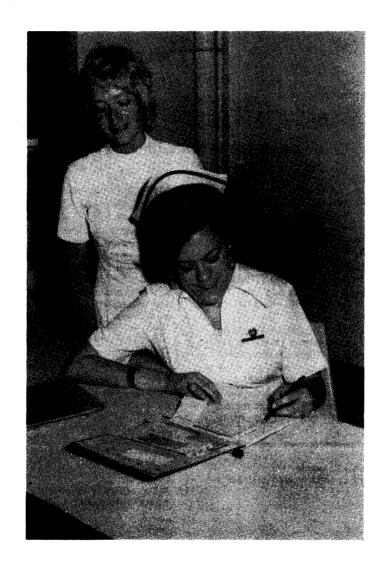
Since Respiratory Therapy is a new and growing field, qualified technicians are in great demand. Hospitals are the major employer of the respiratory technician. Additional experience and education would qualify a person for technical director, assistant director, shift supervisor, staff therapist, outpatient supervisor, and pulmonary function technicians.

Employment other than hospitals would include instructor, salesperson, or research.

# RESPIRATORY THERAPY CURRICULUM

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	• • • •
Engl 0111 Math 0108 Chem 0121 RpTT 0101 Biol 0200		G B B T B	5 5 3 2 3	0 0 3 0 3	4 4 4 2 4	RpTT 0112 RpTT 0201 RpTT 0211 RpTT 0202	Clinical Specialties Respiratory Procedure I	T T T	0 3 2 4	20 3 3 0	6 4 3 4
			18	6	18				9	26	17
RpTT 0111 RpTT 0121 RpTT 0102 Biol 0235	SECOND QUARTER Clinical Practice I Cardiopulmonary Phys. Intro. to Resp. Ther. Equip. Microbiology	Т Т Т В	0 4 2 3 —	20 0 3 3 —	6 4 3 4 —	RpTT 0113 RpTT 0114 RpTT 0212	FOURTH QUARTER Clinical Practice III Clinical Practice IV Respiratory Procedure II	T T T	0 0 2 - 2	20 20 3 — 43	6 6 3 — 15

Please Note: Only those students that have been officially accepted into the program or received program director approval may take the courses beginning with the RPPT prefix.



### **ASSOCIATE DEGREE NURSING**

#### **ADMISSION PROCEDURES**

- Applicant completes the application and sends it to Shawnee State College, P.O. Box 790, Portsmouth, Ohio, 45662. A fee of \$10 which is non-refundable should accompany the completed application.
- Applicant has the high school counselor forward a transcript to the College, also transcripts from other colleges. LPN's are to have a transcript sent from their practical nursing school.
- Applicant completes Biographical Information Form furnished by the College and send it to: Associate Degree Nursing Program Director, Shawnee State College, P.O. Box 790, Portsmouth, Ohio, 45662.
- 4. Applicant takes the National League for Nursing (Pre-Nursing and Guidance) Examination. This examination is given once a year at the College but may be taken at other locations with results sent to Shawnee State College. All scores must be at the 40th percentile or above with the Reading score at the 50th percentile or above.
- Applicant takes the American College Test (ACT) and has results forwarded to the College. A score of 15 or more must be made in Natural Science.
- Applicant meets the following high school requirements by having:
  - (a) A grade average of at least 2.5 on a 4.0 scale.
  - (b) Completed algebra, biology, and chemistry with at least a 2.0 average.

- 7. Applicant is interviewed by the Director of Professional Nursing.
- 8. Applicant must have satisfactory health; a physical examination is required.
- 9. If the applicant meets the above criteria, faculty will consider the applicant for admission to the program. The ADN program can accept only a limited number of students; therefore, a rating system will be utilized to make final determination of placement in the program. This system will take into account the high school grade average; rank in class; grades in biology, algebra and chemistry; ACT scores; NLN-PNG scores; and any college work done. When all qualified students are not admitted to the class, an alternate list will be established. Alternates will be admitted if one or more of the original group is unable to enroll. These applicants will also be eligible for the next class if they maintain at least a 2.0 average in college academic courses.
- 10. Once a student has been officially admitted to the ADN program, he has until June 1 or no later than one month after final acceptance to make a deposit of \$100 on the first quarter's tuition. If the student is applying for financial aid, other arrangements are possible. However, it is the student's responsibility to either pay the \$100 or make other arrangements with the Dean of Student Services before June 1. If he has done neither of the above, his name will be dropped from the list and an alternate taken into the program.
- 11. When officially admitted, the applicant will purchase the appropriate uniform and Professional Liability Insurance.

# **Associate Degree Nursing**

Associate degree nurses graduating from Shawnee State General and Technical College are qualified to take the Ohio State Board examination for registered nurses, and after successfully passing this examination are capable of providing nursing care at a beginning level in hospitals, nursing homes, doctor's offices and clinics, and selected public health agencies.

#### Accreditation

The Associate Degree Nursing Program has approval by the Ohio State Board of Nursing Education and Nurse Registration.

## ASSOCIATE DEGREE NURSING CURRICULUM

#### **FIRST YEAR**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FALL QUARTER						FALL QUARTER				
ADNr 0101	Nursing I	T	6 5	4	8	ADNr 0201	Nursing IV	Т	4	6	7
Engl 0111	Contemp. Writing Skills I	G	5	0	4	ADNr 0202		Ť	4	6	7
Biol 0290	Principles of Anatomy &					Engl 0112	Contemp. Writing Skills II	G	. 5	ŏ	4
	Physiology I	В	4	3	5			_	_		
			_	_					13	12	18
			15	7	17						-
	WINTER QUARTER						WINTER QUARTER				
ADNr 0102	Nursing II	Т	4	6 3	7	ADNr 0203	Nursing VI	Т	4	6	7
PSci 0105	Physical Science	В	4	3	5	ADNr 0204		Ť	4	6 6	7
Biol 0291	Principles of Anatomy &	_	_	_			Elective	Ġ	4	ŏ	4
	Physiology II	В	4	3	5				_	_	
									12	12	18
			12	12	17						
	SPRING QUARTER						SPRING QUARTER				
A DNI: 0400		_		_	_	ADNr 0205	Nursing VIII	Т	4	21	14
ADNr 0103	Nursing III	ı	4	6	7		Elective	G	4	0	4
Psyc 0101 Biol 0235	Principles of Psychology	G B	4 3	0	4					_	_
BIOI 0233	Microbiology I	В	3	4	5				8	21	18
		Λ	11	10	16						
			• • •		10	Please Not	e: Only those students that ha	ve heen	official	v acce	ented
	SUMMER QUARTER						into the program or received				
Psyc 0173	Human Growth &						may take the courses begin	nina wit	h the Al	ONR n	refix
. 0,00110	Development	G	4	0	4		,,	9		p	. 0117.
Soci 0101	Principles of Sociology	Ğ	4	ő	4						
Psyc 0270	Abnormal Psychology	Ğ	5	ŏ	5						
,		_		_	_						
			13	0	13						

### PRACTICAL NURSING

#### **ADMISSION PROCEDURES**

- Applicant completes the application and sends it to Shawnee State College, P.O. Box 790, Portsmouth, Ohio 45662: a fee of \$10 which is non-refundable should accompany the completed application.
- Applicant has the high school forward his/her transcript to the College or submits a copy of the general equivalency examination (G.E.D.).
- Applicant takes the Psychological Corporation Entrance Examination for Schools of Practical/Vocational Nursing. This examination is given at least once a year at the College, usually in January, but may be taken at other locations with results sent to the College.
- Applicant completes the Biographical Sketch form furnished by the College and sends it to the Director of the Program.
- Applicant has three persons who are not relatives complete the recommendation form furnished by the College. These forms are to be returned to the Program Director.
- Applicant is interviewed by the Program Director and a member of the Student Services Staff.
- Applicant must be in good health: state of health is determined by a pre-entrance physical examination by the applicant's physician and includes a chest X-ray, laboratory tests and immunizations.
- Completed applicant files will be reviewed by the Admissions Committee, consisting of the nursing faculty and a representative of the Student Services staff.
- Qualified applicants who are not admitted to the class will be placed on the alternate list. Alternates will be admitted if one or more of the original group is unable to register.
- 10. When officially admitted, the applicant has one month to make a deposit of \$100 on the first quarter's tuition. If the applicant is seeking financial assistance it is his/her responsibility to arrange deferment of the deposit with the Student Services staff within one month of acceptance. If the applicant does neither, his/her name will be removed from the class list.
- When officially admitted, the applicant will purchase the appropriate uniform and Professional Liability Insurance.

#### PROGRAM DESCRIPTION

Nursing is considered a personal service to a patient, planned to consider his individual personality as well as his health problem. The focus of practical nursing is to recognize the individual as a unique personality, to maintain body functions, and to protect the patient from illness or accidents. In complex nursing situations, the practical nurse functions as an assistant to a physician or registered nurse.

Each quarter all students must achieve at least an accumulative grade point average of 2.0 as well as a C in each practical nursing course to progress in the program. Upon completing the course, the student will receive a certificate in practical nursing and will be eligible to write the State Board Examination for Practical Nursing for licensure.

#### **Job Opportunities**

The practical nurse may find job opportunities in private duty nursing: institutional nursing in general hospitals or in specific fields, such as obstetric, pediatric, surgical, medical, psychiatric and other specialities. Opportunities exist in other agencies, also: physicians' offices, nursing homes, rehabilitation centers, health centers and visiting nurse programs. Practical nurses are found in industry, such as large factories, airlines and large department stores. Government agencies, namely, the U.S. Army, U.S. Navy and Peace Corps, provide job opportunities.

# PRACTICAL NURSING CURRICULUM

Course No.	Course	Code	Class Hrs.		Clin. Hrs.		Course No.	Course	Code	Class Hrs.		Clin. Hrs.	
	FIRST QUARTER							THIRD QUARTER					
LDN:: 0404	Body Struc. & Function	В	4	2		4	LPNr 0113	Practical Nursing III*	Т	12	2	14	8
LPNr 0101	Practical Nursing I	Ť	6	4	12	10		Practical Nursing VI*	Т	12	2	14	8
LPNr 0111 Psyc 0101	Prin. of Psychology	Ġ	5	•		4				<u></u> 24	4	 28	16
			<u> </u>	<u></u>	12	18	•	FOURTH QUARTER					
			15	O	12	10	LPNr 0114	Practical Nursing IV*	T	12	2	14	8
	SECOND QUARTER									-		14	8
LPNr 0110	Nutrition	В	2			2				12	2	14	O
LPNr 0112	Practical Nursing II*	Т	8	5	14	6	*Half-quarte	ar courses					
LPNr 0115	Practical Nursing V*	· T	8	5	14	6	naii-quaite	51 COUISCO					
Soci 0101	Prin. of Sociology	G	5			4							
			23	10	 28	16	Please Note	e: Only those students to into the program or red may take the courses	ceived p	rogram	direct	tor ap	provai

# **EMERGENCY MEDICAL TECHNICIAN — PARAMEDIC**

#### **ADMISSION PROCEDURES**

In addition to meeting requirements listed on Page 57, the person seeking admission to the Paramedic Program must be at least 18 years of age, have a high school diploma or GED and possess a valid Ohio drivers license.

#### **PROGRAM DESCRIPTION**

The paramedic program is designed to prepare persons who can provide life support at the scene of any emergency. The program includes both classroom and hospital experience. In addition to performing the functions of an EMT-ambulance, under the revised code of Ohio the paramedic is further certified to perform the following life support or intensive care techniques: cardiac monitoring; defibrillation; airway or gastric intubation; relief of pneumothorax; and administration of appropriate drugs and intravenous fluids. These functions are performed in conjunction with a cooperating licensed medical doctor, doctor of osteopathic medicine and surgery, or a physician advisory board.

#### Examination

Upon completion of the EMT—P training program each student, before receiving a certificate of competency, shall pass a comprehensive examination which has been approved by the Ohio Board of Regents. The certificate of competency is issued by Shawnee State College for a three-year period. Thereafter, the certificate is renewed through the Ohio Board of Regents.

#### **Job Opportunities**

The paramedic may find employment with an ambulance service in either a metropolitan or rural area. In addition, many large companies now employ paramedics in their health and safety divisions. While hospitals and medical centers frequently employ paramedics, it is uncertain at the present time to what extent area hospitals will use the paramedic.

#### **EMERGENCY MEDICAL TECHNICIAN — PARAMEDIC CURRICULUM**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						THIRD QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	EMT 0105	**Defensive Driving	В	1	3	2
EMT-A 0101	*EMT Orientation	Т	3	3	4	EMT-P 0106	Care of Acute Medical				
Biol 0290	Anatomy & Physiology I	В	3	3	4		Emergencies I	T	5	8	7
EMT-A 0102	*Emergency Medical					EMT-P 0107	Equipment and				
	Condition & Technique I	Т	4	6	6		Communications	Т	2	4	3
	·		_		_	EMT-P 0108	Pharmacology	Т	2	0	. 2
			15	12	18				_		_
									10	15	14
	SECOND QUARTER										
Engl 0112	Contemp. Writing Skills II	G	5	0	4		FOURTH QUARTER				
Biol 0291	Anatomy & Physiology II	B	3	3	4	RMMT 0301	Principles of Management	В	4	Q	4
EMT-A 0103	, , ,	_	_	_		EMT-P 0109	Care of Acute Medical				
	Condition & Technique II	Т	3	6	5		Emergencies II	T	2	16	5
EMT-A 0104	·		_	-	-		Elective (Speech, Sociology,	G			
	& Handling	Т	2	4	3		or Psychology)		4	0	4
	,		_	_	_		. 2			_	_
			13	13	16				10	16	13

## **EMERGENCY MEDICAL TECHNICIAN — AMBULANCE**

\*Meets course hour requirements as set forth in H.B. 832 and the State Department of Education for certification as an EMT—A.

\*\*Will also be required in 11/2 years from now.

#### Renewal of Certification: (EMT—A)

Completion of the 27 hour EMT—A refresher course established by the Trade and Industrial Service, Division of Vocational Education, Ohio Department of Education.

## Emergency Medical Technician — Ambulance (EMT—A) Refresher Training Course

The Emergency Victim Care course is designed as the basic course for EMT training. Demonstration and practice is emphasized as the basic teaching method. The refresher course is designed for the EMT who has reached the level of training and is active in the field. This is to be a refresher course, so demonstration and critique of skills are to be emphasized.

This course will consist of a minimum of twenty-seven (27) hours or nine (9) three-hour sessions.

Please Note: Only those students that have been officially accepted into the program or received program director approval may take the courses beginning with any EMT prefix.





## **ENGINEERING TECHNOLOGIES**

(ASSOCIATE OF APPLIED SCIENCE DEGREE)

Chemical Technology

Civil Engineering

Electro-Mechanical Engineering

Plastics Engineering

## CHEMICAL TECHNOLOGY

The chemical industry is one of the most dynamic in terms of growth. The Ohio River Valley from Pittsburgh to Louisville is perhaps the largest chemical producing area in America, and provides a great employment opportunity for graduates from the Chemical Technology Program.

The Chemical Engineering Technology curriculum encompasses a wide range of skills development in Analytical Chemistry, including the latest methods in Instrumental Analysis, Chemical Engineering Principles, Chemical Plant Operation and Maintenance, and Environmental Pollution Control.

#### **Job Opportunities**

Positions available in Chemical Technology include:

CHEMICAL PRODUCTION TECHNICIAN — Controls operation of chemical production facilities, and is responsible for maintaining high production levels.

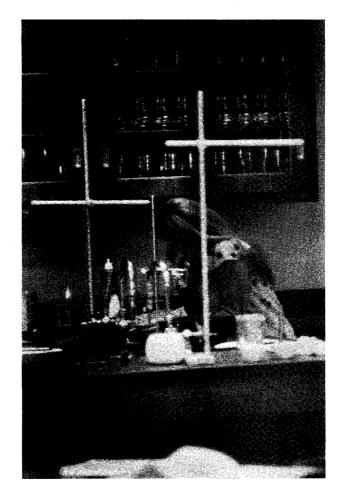
CHEMICAL RESEARCH TECHNICIAN — Assists chemists and engineers in the development of new products and processes by designing, constructing, and operating experimental chemical plants or by performing laboratory experiments.

CHEMICAL QUALITY CONTROL TECHNICIAN — Assures a high quality level in products manufactured by performing chemical tests in the laboratory.

POLLUTION CONTROL TECHNICIAN — Takes samples of air and water and analyzes them to assure low pollution levels. Assists in the development of pollution control methods.

CHEMICAL SALES OR TECHNICAL SERVICE REPRESENTATIVE — Aids customers in the choice of the correct product to purchase and assists in solving customer problems.

Other positions would be available upon the attainment of several years of experience. Supervisory level positions are open to the experienced technician with a good technical background as well as the ability and desire to assume responsibility.



## **CHEMICAL CURRICULUM**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FALL QUARTER						FALL QUARTER				
Engl 0111	Contemp. Writing Skills I		5	0	4	Engl 0121	Technical Writing		3	0	3
Chem 0141	Chemistry I		4	3	5	PEng 0206					
Math 0130	College Algebra I		5	3 0 3	4	•	Chemical Engineering		3	2	3
PEng 0102			2	3	3	Chem 0202	Process Instrumentation		3	3 3 2	4
Chem 0101						Phys 0201	Physics (Mechanics)		3	3	4
	Chemical Technology		3	2	3	Chem 0203	Pollution and Abatement		3	2	3
			_	_	_				_		_
			19	8	19				15	10	17
	WINTER QUARTER						WINTER QUARTER				
Engl 0112	Contemp. Writing Skills II		5	0	4	PEng 0204	Industrial Economics		5	0	4
Math 0131	College Algebra II		5		4	ENGR 0101	First Aid and Safety		1	Ĩ	1
EnDr 0101	Engineering Drawing I		1	0 6 3	3		Chemistry V		3		4
Chem 0142	Chemistry II		4	3	5	Phys 0202	Physics (Electricity)		3	3 3 2	4
Engr 0209	Industrial Supervision		3	0	3	Chem 0211	Unit Operations I		3	2	3
				_	<del></del>				_	_	
			18	9	14				15	9	16
	SPRING QUARTER						SPRING QUARTER				
Engl 0115	Comp. & Mass. Com.		5	0	4	Chem 0206	Chemistry VI		3	3	4
Chem 0143	Chemistry III		4	3	5	Phys 0203	Physics (Heat, Light, Sound)		3	3	4
Math 0132			5	0	4	PEng 0202	Production Control				
Chem 0225	Instrumental Methods					-	& Planning		3	3	4
	of Analysis		3	3	4	Chem 0212	Unit Operations II		3	3	4
			_	_	_	PEng 0207	Fund. of Process Equip.				
			17	6	17		& Maintenance		2	0	2
									<u> </u>	12	18

Students may elect a different sequence of math with advisor approval.

## **CIVIL ENGINEERING TECHNOLOGY**

The Civil Engineering Technology program prepares a student to become a technician in a field which concerns itself with the planning, design, and construction of both fixed structures and ground facilities for land, sea, or air transportation. It is concerned with the flow and uses of water. It is concerned with protection, in war and peace, against the destructive forces of man or nature. In other words, civil engineers and technicians build airports, bridges, dams, highways, powerhouses, pipelines, and railroads.

Thus, the engineering technician must possess skills, in such a variety of areas as: hydraulics, flood control, irrigation, steel and concrete structural work, field surveying, traffic studies, computations, and the fundamentals of construction. And he is specifically trained to draw up plans and specifications; estimate costs and materials; use the transit, level and other surveying instruments; prepare maps; inspect jobs; and supervise construction.

#### **Job Opportunities**

Positions available to the civil engineering technician are:

COMPUTER — He determines coordinates for geographic position, land lines, and land monuments in addition to computing quantities.

CONTRACTOR'S AIDE — He prepares plans and detail drawings for elements of construction projects.

ESTIMATOR — He estimates costs, quantities of materials and supplies, and labor for construction projects.

INSPECTOR — He inspects line and grade references, forms, materials, and construction methods.

SURVEYOR — Surveys earth's surface and oversees engineering survey partly engaged in determining exact location and measurements of points, elevations, lines, areas, and contours of earth's surface to secure data used for construction map making, land valuation, mining or other purposes. Calculates information needed to conduct survey from notes, maps, deeds, or other records.

Other positions are available to the graduate engineering technician after several years of experience. These include: construction supervisor, highway engineering supervisor, photogrammetrist, and specifications writer.



## CIVIL ENGINEERING CURRICULUM

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Engl 0121	Technical Writing	G	3	0	3
Math 0130	College Algebra I	B	5	ō	4	Phys 0203	Physics III (Heat, Light,				
Econ 0101	Economics I	В	5	0	4	-	& Sound)	G	3	3	4
CEng 0101		B T	3	0	3	CEng 0211	Highway Construction I	T	5	0	4
EnDr 0101	, ,	T	1	0 5	3	CEng 0113	Route Surveying I	T	2	6	3
	ggg		_	_	_	CEng 0201	Concrete Design	Т	4	2	4
			19	5	18						_
									17	11	18
	SECOND QUARTER										
Engl 0112	Contemp. Writing Skills II	G	5	0	4		FIFTH QUARTER				
Math 0131	College Algebra II	B B	5	0	4	CEng 0202	•	Ţ	2	0	2
Phys 0201	Physics I (Mechanics)	В	3	3	4	CEng 0203	Statics	T	4	0	3
CEng 0111	Surveying I	T	2	3 5 5	3	CEng 0204		T	3	0	3
EnDr 0102	Engineering Drawing II	T	1 .	5	3	ENGR 0101		Ţ	1	1	1
			_		_	Psyc 0101	Prin. of Psychology	G	5 2 2	0	4
			16	13	18	CEng 0205		T	2	1	2 3
						CEng 0114	Route Surveying II	. <b>T</b>	2	5	3
	THIRD QUARTER								-	7	18
Engl 0115	Comp. & Mass. Comm.	G	5	0	4				19	,	10
	Trig. & Anal. Geometry	В	5 5	0	4						
Phys 0202	Physics II (Electricity)	B T	3	3 5 5	4		SIXTH QUARTER				
CEng 0112	Surveying II			5	3	CEng 0206	Engr. Prob. & Field Inspec.	T	0	3	1
EnDr 0103	Engineering Drawing III	Т	1	5	3	CEng 0212	Highway Construction II	Т	5	0	4
			_		_	CEng 0207	Strength of Materials I	Т	5 3 2	2 3	3
			16	13	18	CEng 0208		T		3	3
						CEng 0115			4	0	3
						Soci 0101	Prin. of Sociology	G	5	0	4
									19	- 8	18

 $Students\ may\ elect\ a\ different\ sequence\ of\ math\ with\ advisor\ approval.$ 

# ELECTRO-MECHANICAL ENGINEERING TECHNOLOGY

An electro-mechanical engineering technician is a para-professional educated for positions which encompass both electrical and mechanical engineering technologies but which demand more than just a simple combination of the two fields. The electro-mechanical engineering technician, for example, may work in the computer industry in positions which could not be handled by the electrical or mechanical engineering technician.

This field is somewhat new to business and industry; therefore, its potential has merely been scratched. Many of the electromechanical graduates are working in business and industry at the present time which indicates the demand for their services is great.

#### **Job Opportunities**

Positions available in the electro-mechanical technology are almost unlimited. Listed below are some of those positions.

ELECTRO-MECHANICAL INSPECTOR — Inspects and tests electrical components, housings, and finished assemblies of electrical sensing devices.

ELECTRO-MECHANICAL TECHNICIAN — Fabricates, tests, analyzes, and adjusts precision electro-mechanical instruments.

ELECTRO-MECHANICAL ASSEMBLER — Tests assembled electronic scale components with oscilloscope and voltmeter to detect missing parts, loose wires and defective solder joints.

ELECTRICAL AND ELECTRONIC TECHNICIAN — Applies electronic theory, principles of electrical circuits, electrical testing procedures, engineering mathematics, physics, and related subjects to layout, building, testing, trouble-shooting, etc.

ELECTRO-MECHANICAL DESIGN & DEVELOPMENT TECHNICIAN — Develops detailed design drawings and related specifications of mechanical equipment, according to engineering sketches and design proposal specifications.

Other positions are available to the graduate technician after several years of experience, such as: contractor, designer, estimator, and sales representative.

# ELECTRO-MECHANICAL ENGINEERING CURRICULUM

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Engl 0121	Technical Writing I	G	3	0	3
Math 0130	College Algebra I	B	5	ŏ	4	Phys 0203	Phys. (Heat, Light, & Sound)	G	3	3	4
Econ 0101		В	5 5	0	4	EMng 0201	Intro. Electro-Mech. Sys.	T	1	3	2
EMng 0111	Electrical Fundamentals I	Ť	3	3	4		Mechanical Analysis	· T	3	3	4
EnDr 0101	Engineering Drawing I	T	1	3 5	3		Mechanics and Dynamics	<u>T</u>	1	3	. 2
			_	_	_	EMng 0122	Electronics II	Т	2	4	3
			19	8	19				13	16	— 18
									13	10	10
	SECOND QUARTER						FIFTH QUARTER				
Engl 0112	Contemp. Writing Skills II	G	5	0	4	Soci 0101	Prin. of Sociology	G	5	0	4
Math 0131		B B	5 5 3	0	4		Electronics Logic Circuits I	Ť	2		3
Phys 0201		В		0 3 3	4		Control Devices	Ť	2 2 3	5 5 3 2	3
EMng 0101		Ţ	1	3	2		Automatic Control Systems	Ť	3	3	4
EMng 0112	Elect. Fundamentals II	T	, 3	3	4		Hydraulics and Pneumatics	Ť	3	2	3
			4.77	_	_	Engr 0101		Т	- 1	1	1
			17	9	18	g. 0.0.			_	_	_
	THIRD QUARTER								16	14	18
Engl 0115	Comp. & Mass. Comm.	G	5	0	4		SIXTH QUARTER				
Math 0132	Trig. & Anal. Geometry	В	5 5 3 2	0.	4	D 0404		^	-	•	4
Phys 0202	Physics (Electricity)	В	3	3	4	Psyc 0101	Prin. of Psychology	G T	. 5	0	3
EMng 0121	Electronics I	Τ.	2	3	4	EMng 0212		÷	4	5 6	3
EMng 0103	Electro-Mechanical Drawing	Т	1	3	2	EMng 0207			2	4	3
			_			EMng 0208		÷	3	. 0	3
			16	.11	18	Engr 0209	Industrial Supervision	'	_		_
									13	15	16

Students may elect a different sequence of math with advisor approval.

## PLASTICS ENGINEERING TECHNOLOGY

Modern research and technology are making the plastics industry the fastest-growing industry in the world. Plastic manufacture now ranks as one of the few billion-dollar industries in the United States, having increased its production more than 250 per cent from 1955 to 1970.

The Plastics Engineering Technology curriculum is designed to provide a wide range of learning experiences, including design, drawing, planning, testing, chemistry of plastics, manufacturing processes, molding, casting, welding, thermoforming, extrusion, electroplating, and other finishing methods.

#### **Job Opportunities**

Positions available in Plastics Engineering Technology are:

QUALITY CONTROL TECHNICIAN — Samples raw materials and finished products and performs tests to assure compliance with quality specifications.

PILOT PLANT TECHNICIAN — Assistant to an engineer, operates experimental plants. Responsible for taking data and making observations.

APPLICATION RESEARCH TECHNICIAN — Blends and compounds plastics with additives, filters, colors, etc. Assists in selecting proper plastics for specific products and applications.

PLASTIC ARTICLE PRODUCTION TECHNICIAN — Operates and supervises the operation of commercial equipment used in the production of plastic items, such as extruder, injection molding machine, thermoformer, etc.

SENIOR TECHNICIAN — Supervises other technicians in all operations and takes part in new projects or process evaluation.

TECHNICAL SERVICE REPRESENTATIVE — As an employee of a plastics resin or equipment manufacturer, aids customers in the proper selection and use of such products, and in solving customer problems.

Other positions are available to the graduate technician after several years of experience. Supervisory positions are open to the well-experienced technician with a background in engineering techniques and problem solving.



## PLASTICS ENGINEERING CURRICULUM

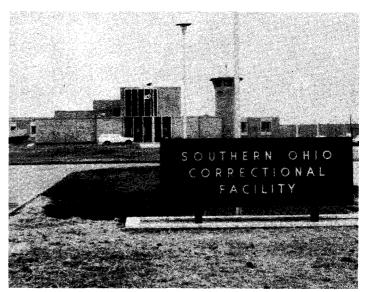
Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FALL QUARTER						FALL QUARTER				
Engl 0111	Contemp. Writing Skills I		5	0	4	Engl 0121	Technical Writing		3	0	3
	Chemistry I		4	3	5		Introduction to				
Math 0130	College Algebra I		5 2	0	4		Chemical Engineering		3	2	3
PEng 0102	Machine Tools I		2	0 3 2	3	PEng 0209	Fabrication & Mfg. of				
PEng 0101	Introduction to Plastics		3	2	3	•	Plastic Products		3	3	4
			_	_		Phys 0201			3	3	4
			19	8	19	PEng 0104	Thermo-Forming		2	3	3
	WINTER QUARTER								14	11	17
E10440			5	0	4						
Engl 0112 Math 0131	Contemp. Writing Skills II College Algebra II		5	ŏ	4		WINTER QUARTER				
EnDr 0101			1	6	3	PEng 0204	Industrial Economics		5	0	4
	Chemistry II		4	3	5	Engr 0101	First Aid & Safety		1	1	1
Engr 0209	Industrial Supervision		3	Ō	3	PEna 0203			2	3	3
Liigi 0200	maddina, capervioler		_	_		Phys 0202	Physics (Electricity)		3	3	4
			18	9	19	PEng 0205					
						ū	Material Handling		3	2 3	3
	SPRING QUARTER					PEng 0105	Injection Molding		2	3	3
Engl 0115	Comp. & Mass. Comm.		5	0	4				_	<u> </u>	18
Chem 0143	•		4	3	5				16	12	18
Math 0132	Trig. & Anal. Geometry		5 2	0	4						
PEng 0103	Extrusion Molding		2	3	3		SPRING QUARTER		_		
_			_			PEng 0201	Plastic Finishing		3	3	4
			16	6	16	Phys 0203	Physics (Heat, Light, Sound)		3	3	4
						PEng 0202			•	2	4
							Planning		3 3	3	4 4
						PEng 0210			3	3	4
						PEng 0207	Fund. of Process Equip.		2	0	2
							& Maintenance		_		
									14	12	18

 $Students\ may\ elect\ a\ different\ sequence\ of\ math\ with\ advisor\ approval.$ 









# PUBLIC SERVICE TECHNOLOGIES (ASSOCIATE OF APPLIED SCIENCE DEGREE)

Corrections Technology

Parks and Recreation Administration

Social Services Technology

# NATURAL RESOURCES TECHNOLOGY (ASSOCIATE OF APPLIED SCIENCE DEGREE)

**Parks and Recreation Administration** 

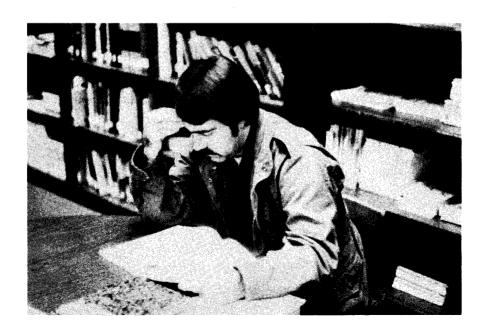
## CORRECTIONS TECHNOLOGY

The Corrections Technology Program is designed to provide the student with an understanding of deviant behavior within modern society. Specially designed courses will deal with the problems of correctional law, the prevention, identification, and correction of deviant behavior.

The correctional specialist works in major areas as group supervisors, correctional officers, and other instructional personnel concerned generally with the custody and care of offenders in group settings. More than 50% of the personnel in the correctional field belong to this group.

## **Job Opportunities**

Graduates are specialists trained to assist in the supervision, research, and administration necessary to estimate and determine the appropriate time to release an inmate from an institution and ultimately discharge him from supervision. They are qualified to become correctional officers.



## **CORRECTIONS CURRICULUM**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Spch 0101		G	3	0	3
Math 0105		В	5	0	4	CorT 0201	Corr. Interview &	•		U	3
CorT 0101		Т	3	0 0 0	3		Counseling Techniques	Т	2	3	3
CorT 0102	Criminology	Ţ	4	0	3	CorT 0202	Drug Abuse	Ť	2	3	3
Psyc 0101	Prin. of Psychology	G	5	0	4	CorT 0203		В	5		4
				_		CorT 0204	Correctional Law	T	4	0 3	5
			22	0	18				_	_	
	SECOND QUARTER								16	9	18
Engl 0112	Contemp. Writing Skills II	G	5	0	4		FIFTH QUARTER				
CorT 0103	Juvenile Delinquency	Т		3	3	CorT 0205	Group Interaction	· T	1	6	•
CorT 0104		В	2 3 5 3	0	3	Engl 0121	Technical Writing I	Ġ	3	6 0	3 3
Soci 0101	Prin. of Sociology	G	5	0	4	CorT 0206	Correctional Case Evaluation		3	6	5
CorT 0105	Probation and Parole	Т	3	3	4	CorT 0207	Observation Techniques	T	2	2	2
			_	_	_	CorT 0208	Correctional Programs	Т	2 5	ō	5
			18	6	18				_	_	
	THIRD QUARTER								14	14	18
Engl 0115	Comp. & Mass. Comm.	G	5	0	4		SIXTH QUARTER				
Psyc 0270	Abnormal Psychology	Ť	4	Ö	4	CorT 0209	Research Apprec. in Corr.	Т	4	3	_
CorT 0106	Constitutional Law	В	3		3	CorT 0210	Prin. of Leadership	В	4	0	5 4
Acct 0101	Accounting I	В	2	3	3	CorT 0212	Community Programs	Ť	3	6	5
CorT 0107	Philosophy of Corrections	Т	2 2	0 3 2 3	2	Govt 0100	Intro. to American Systems	•	4	Õ	4
ExST 0101	Typing I	Т	2	3	3		,			_	
			— 18	_	_				15	9	18
			18	8	19	It is high!	y recommended that account	<del></del>			
	SUMMER QUARTER					Psyc 0101	y recommended that courses ( be taken by the beginning C	ori 01 orrectio	UT, Cor	0102	, and
CorT 0111	*Internship	Т	0	40	6	proceeding	to other course work; however	this is	notare	auirer	nent
CorT 0112	*Special Problems	Ť	2	0	2	*Two qua	irters in Corrections Technolog	nvare r	aquired	for a	ortio
			_	_	_	ipation in th	ne Internship and Special Prob	lems co	equileo Durses.	ior p	aruc-
			2	40	8						

## SOCIAL SERVICES TECHNOLOGY

The Social Services Technology Program provides a two-year college level program for high school graduates interested in working with the people of the local community and in helping them with their daily problems.

Opportunities in health, education and welfare have expanded more rapidly than has the number of highly trained specialists to meet them.

#### **Job Opportunities**

Graduates are specialists trained in field work, specialized courses in both group work and casework, human relationships, race relations, social problems, and group dynamics and leadership. They are qualified to become case workers, child care workers, mental health aides, rehabilitation aides, and vocational counselor trainees.

## **SOCIAL SERVICE CURRICULUM**

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	SSTc 0201	Public & Child Welfare	T	3	2	3
Soci 0101	Prin. of Sociology	Ğ	5	ŏ	4	CorT 0102	Criminology	Т	4	0	3
Psyc 0101	Prin. of Psychology	Ğ	5		4	SSTc 0212	0,	Т	3	3	4
Psyc 0173	Human Growth & Devel.	B	5 3 3	0 2 2	3	SSTc 0204		T	3 2	0	2
SSTc 0102	Intro. to Social Services	Ť	3	2	3	Econ 0101	Prin. of Economics I	В	5	0	4
0010 0102	mino. to bootal bettered		_		_	SSTc 0113	Social Serv. Internship III	Т	0	6	2
			21	4	18					_	_
									17	11	18
	SECOND QUARTER										
Engl 0112	Contemp. Writing Skills II	G	5	0	4		FIFTH QUARTER			_	_
SSTc 0103	Contemp. Social Problems	В	4	0	3	SSTc 0206	Consumer Economics	В	5	0	4
SSTc 0107		В	5	0	4	SSTc 0205		_	_	•	•
Psyc 0131	Human Adjustment	В	3	0	3		Urban Society	B	3	2	3
SSTc 0104	Personal Growth & Devel.	T	2	0	2	SSTc 0210	Medical Sociology		3	0	3
SSTc 0111	Social Serv. Internship I	T	0	6	2	SSTc 0207		· T	3	0	3
	•		_	_		SSTc 0114		T	0 4	6 0	2 3
			19	6	18	CorT 0103	Juvenile Delinquency	T	4		_
	THIRD QUARTER								18	8	18
- 10445		G	5	0	4						
Engl 0115	Comp. & Mass. Comm.	T	3	1	3		SIXTH QUARTER				
SSTc 0105	Marriage and the Family Speech I		3	Ö	3	SSTc 0208	Community &				
Spch 0101 SSTc 0106		G T	2	ŏ	2	0010 0200	Community Resources	Т	3	2	3
Psyc 0270	Abnormal Psychology	Ġ	2 5	. 0	4	SSTc 0209		Т	1	3	3 2
SSTc 0112		Ť	ŏ	6	2	SSTc 0203		T	. 4	0	3
3310 0112	Social Serv. Internation	•	_	_	_	SSTc 0211					
			18	7	18		Relations	Т	2	3	3
							Electives	G	3	0	3
						SSTc 0115	Social Serv. Internship V	Т	0	6	2
									_		_
									13	14	16





## NATURAL RESOURCES TECHNOLOGY (ASSOCIATE OF APPLIED SCIENCE DEGREE)

# PARKS AND RECREATION ADMINISTRATION

The Park and Recreation curriculum is designed to graduate a technician capable of handling design, layout, and construction of water and recreational areas which will include boating, swimming, camping, playground facilities, basketball courts, baseball and softball areas, etc. Not only must he have thorough understanding in this area, he will be exposed to management of such areas, maintenance, and serve as a supervisor for personnel under his control. The Park and Recreation Administration technician will be able to develop recreational programs and give instructions in all areas of recreation.

## **Job Opportunities**

Positions available in Park and Recreation Administration Technology:

ASSISTANT PARK MANAGER — Supervises and coordinates activities of workers in operation maintenance and repair of roadways, swimming pools, golf courses, play areas, and other park equipment and facilities.

ADMINISTRATIVE ASSISTANT TO RECREATION DIRECTOR OR SUPERINTENDENT OF RECREATION — Assists in plans, promotes, organizes, and administers public recreation service for entire communities. Studies local conditions and assists in the developing of immediate and long-range plans to meet recreational needs of all age groups.

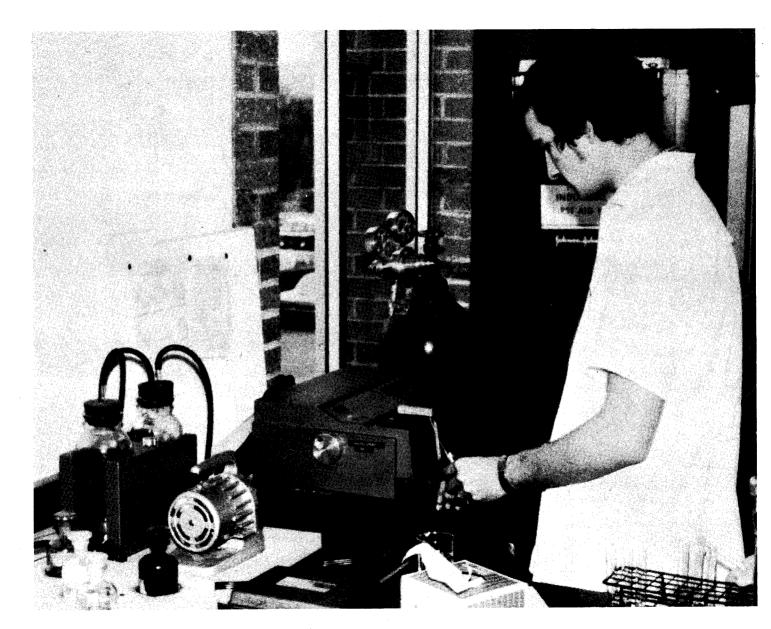
CAMP SUPERVISOR OR CAMP MANAGER — Manages constructions of camping areas, selects location and supervises workers engaged in the installation of camping facilities. Inspects and corrects sanitary conditions of camp.

RECREATION SUPERVISOR — Supervises paid and volunteer recreation service personnel in public department, voluntary agency, or similar type facility, such as community centers or swimming pools.

Other positions are available to the graduate technician after several years of experience — positions as turf and grounds specialists, lab and service technician, and assistant in landscape architecture.

# PARKS AND RECREATION ADMINISTRATION CURRICULUM

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Biol 0105	Field Biology	В	2	4	3	PRAd 0211		Т	2	6	3
Biol 0215	General Ecology	B	2	3	3		Outdoor Recreation	Ť	2	5	4
Engl 0111	Contemp. Writing Skills I	G	2 5		4		Forest Manage. & Recreat.	Ť	2 3 5	3	4
Math 0105	Business Mathematics	В	5	0 0 5	4	Soci 0101	Prin. of Sociology	Ġ	5	ŏ	4
EnDr 0101	Engineering Drawing I	T	1	5	3	Spch 0101	Speech I	Ğ	3	ŏ	3
			 15	<u> </u>	17				15	— 14	 18
	SECOND QUARTER						SIETU OUADTED				
PRAd 0101		Т	2	2	3	554	FIFTH QUARTER	_			
PRAd 0102		τ̈́		2 3 3	4	PRAd 0203		Ť	3	3	4
PRAd 0103		Ė	3 2 5.	3	3	PRAd 0204		_			_
Engl 0112	Contemp. Writing Skills II	Ġ	5.	Ŏ	4	PRAd 0212	& Design	T	1	6	3
Math 0101	Basic Algebra	B	5	ŏ	4	Econ 0101		T	2 5	6	3
	J		_	_		Psyc 0101	Prin. of Psychology	B G	5 5	0	4 4
			17	8	18	1 Syc Olol	riii. Oi Fsychology	G	_	_	<del>4</del>
	THIRD QUARTER								16	15	18
PRAd 0104		Т	3	3	4		SIXTH QUARTER				
	Water Pollution & Sanitation	Т	2	4	3	PRAd 0205	Water Recreation	Т	2	2	4
Engl 0115		G	5 5	0	4		Park Protection	τ̈́	3	3 3	4
Math 0130		В	5	0	4	PRAd 0207		Ť	3 3 2	ŏ	2
CEng 0111	Surveying I	T	2	5	3	PRAd 0208	Orientation to Employment	Т	1	1	1
			_	_		PRAd 0209	Wildlife Management	Ť	3	2	3
			17	12	18	Engr 0101	First Aid & Safety	T	1	1	1
	SUMMER QUARTER					Acct 0251	Systems Accounting	В	3	2	3
	Parks & Recreation Intern. Seminars for Critique	Т	0	40	6				16	12	18
	of Experience		2	0	2		ay elect a different sequence	e of ma	th		
				<u>-</u>	8	with advisor	approval.				



## INTER-INSTITUTIONAL ADVANCED STUDY

(OHIO UNIVERSITY COURSES)

Shawnee State has entered into an agreement with Ohio University for the purpose of offering junior, senior, and graduate courses on the Shawnee State campuses. Under the agreement, students may take Ohio University courses on the Shawnee State campuses during or following their course work at Shawnee State. For additional information about opportunities in Ohio University baccalaureate and graduate programs, a student should see his Shawnee State counselor or the Ohio University counselor, whose office is on the Shawnee State South Campus.

## **FIVE DEGREES**

Through the combined efforts of Shawnee State College and Ohio University, students can complete five degree programs at the Shawnee State Campus These programs are:

- 1 Elementary Education
- 2 General Business
- 3 Nursina
- 4 Criminal Justice
- 5 General Studies

The first two years of these programs are offered by Shawnee State College. The last two years will be offered by Ohio University. (Courses are available as long as student registration is great enough to justify offering them.)

# ASSOCIATE OF INDIVIDUALIZED STUDIES DEGREE

The Associate of Individualized Studies Degree (AIS) at Shawnee State General and Technical College has been designed for the primary purpose of allowing students the option of formulating his/her own individualized program of study. The philosophical basis of the degree is predicated upon the assumption that the student may be unable to achieve his/her personal educational goals through one of the more formalized two-year degree structures offered at Shawnee State. This is especially true for those students interested in concentrating or combining a selected mixture of courses encompassing both academic as well as technical offerings in a manner which may not meet the degree requirements of Shawnee State's Associate of Arts, Associate of Applied Science, or Associate of Applied Business Degrees. With the awarding of the AIS, students thus have an opportunity to formulate their own program of study relevant to personal educational goals.

A demand exists among students for certification of two years of post secondary education. With approval, students may formulate a curriculum designed for transfer into a four-year program at a baccalaureate institution or formulate a program designed for immediate employment. There are those students who may also pursue the degree for general or personal enrichment.

## **Organizational Structure**

The AIS Degree will be organized and administered through the Office of the Dean of Student Services. The Dean of Student Services has at his disposal a staff of full-time counselors familiar with the academic and technical course options available at Shawnee State. The Student Services Staff also has access and strong working relationships with faculty in all academic and technical divisions and programs. Thus, because of its wide range of functions and familiarity with program offerings at Shawnee State, it was the feeling of the AIS Degree Committee that the Office of the Dean of Student Services might appropriately be responsible for curricular and procedural matters as well as AIS program evaluations.

#### **Admissions Requirements**

The AIS Degree is available to any student admitted to Shawnee State whose educational objectives and interests cannot be met through one of the more structured degree programs. The student must make formal application by completing the AIS application. The application outlines the student's course of study and intended area of concentration. The student must also explain his reason for pursuing the degree. Two resource faculty or staff members must be consulted in preparation of the program, one of whom must be from the student's stated area of concentration. Both resource members must sign the application before submission for approval to the Dean of Student Services.

The student may submit his application at anytime; however, the student must complete 30 quarter hours of credit after admission into the AIS program. If an application is submitted within the first 10 class days of the quarter, the credits earned that quarter will be included in the 30 credits required after admission to the program.

Once the program receives approval, it should represent a firm contract between the student and faculty/staff involved. Some flexibility and minor alterations should be written into it, but if the major emphasis of the program is changed by the student, it must have written consent of the advisors and approval of the Dean of Student Services.

#### **Graduation Requirements**

Upon completion of 90 quarter hours of credit with a cumulative grade point average of 2.00, the student may be awarded the AIS Degree. Thirty hours must be completed after admission to the program. The Office of the Dean of Student Services will handle individual graduation checks.

#### **Counseling Procedure**

Given the individualistic nature of the degree, it is understood that extensive academic counseling is necessary for each student pursuing this particular program. Each admitted student will be consulting with two resource personnel, particularly the advisor representing the proposed area of concentration. Although the degree is awarded based upon a program of study designed by the student along with consultation and advice from faculty or administrative advisors, the student has ultimate responsibility for his/her program. Each student will be encouraged to discuss his/her plans and program with Student Services Staff members.

Also, students will be encouraged to discuss their program with prospective employers or other relevant nonacademic personnel.

Since the AIS Degree is an individually designed program geared to meet specific educational objectives, it would not be recommended to those students whose interests and/or goals can be better met through one of the more conventional degree offerings at Shawnee State.

#### **Curricular Structure**

The AIS program is not expected to have any particular impact on the curricular offerings at Shawnee State as it does not require the development of new courses. The program does, however, allow the student greater flexibility in designing a program that would meet his/her educational needs. The student will be able to design both specialized and interdisciplinary programs with no restrictions on the number of academic or technical courses included in the student's planned program. The only limitations on the amount of credit granted for Advanced Placement, College Level Examination Programs, Course Credit by Examination, Independent Study, Correspondence Study, etc., are those normally applied to the Associate Degree Programs at Shawnee State and the agreement made in the original AIS contract (application).

Grading policies applicable to all other programs at Shawnee State are also applicable to the AIS Degree. To the extent that policies and procedures are developed for examining accomplishments and competencies of life or other creditable experience for all degree students at Shawnee State, they will also be available to AIS Degree students.

Students may modify their programs so long as the major emphasis and direction of the program is not changed. If the major emphasis of the program is altered, it must have the written consent of the advisors. Subject to all requirements of the program to which they transfer, students may transfer to any other degree program at Shawnee State when they choose.

#### Interinstitutional Cooperation

Relative to interinstitutional cooperation, the AIS Degree can be awarded to students who transfer credits from other institutions. Shawnee State General and Technical College adheres to state articulation guidelines recently adopted by the Ohio Board of Regents.

# GRADUATE REALTORS INSTITUTE DESIGNATION

#### **Purpose**

- A. To fill the need for a more comprehensive and better instruction program in all facets of the real estate profession through courses of instruction in institutions of higher learning.
- B. To provide licensed real estate brokers and salesmen an opportunity for enhancement of professional competence and financial success through participation in the Graduate, Realtors' Institute (GRI).
- C. To enhance the community status of the real estate profession through a formal education program.
- D. To provide individuals not in the profession an opportunity to become knowledgeable about particular facets of the real estate industry.
- E. To recognize those who have successfully qualified for the GRI designation by awarding them a certificate and pin that identifies them as a Graduate, Realtors' Institute (GRI).

#### **Enrollment**

Enrollment in the Real Estate program is not limited to candidates for the GRI certificate.

Individuals seeking information about specific facets of the real estate industry may enroll in any course; however, program curriculum is oriented to the educational needs of the professional.

## **GRI Certificate Program**

The GRI designation is available to those who hold membership in the Ohio Association of Real Estate Boards and have completed the program requirements.

A certificate in recognition of achievement and a GRI lapel pin will be awarded to those individuals successfully completing the program requirements upon application to the Ohio Association of Real Estate Boards, payment of required fees and successful completion of a comprehensive examination.

Please refer to page 125 for the Real Estate Courses and their course description offered at Shawnee State.

## **DEVELOPMENTAL COURSES**

The developmental program is intended for students who do not have the proper educational background to enter their chosen technologies. Offerings include mathematics, biology, chemistry, study techniques and physics. Enrollment is made by compliance with regular admissions procedures. Developmental courses are usually offered during the summers as well as during fall quarter.

## 0091 - Fundamental Math (4)

A brief review of the fundamentals used in arithmetic including addition, subtraction, multiplication, and division as applied to integers and rational numbers. An introduction to the elementary concepts of basic algebra with emphasis on manipulations of algebra expressions, solutions to all types of equations, graphs and formula rearrangements.

## 0092 — Fundamental Chemistry (4)

This course is designed for those students with an inadequate background in chemistry. It should be taken by students planning to enter one of the allied health fields or plastics engineering that have not had high school chemistry. Topics and material presented is intended to increase student's familiarity with terms and chemical process.

## 0093 — Fundamental Biology (4)

This course is designed for those students with an inadequate background in biological science. The course should be taken by those students planning to enter one of the allied health fields that have not had biology on the high school level. Topics and material presented is intended to increase the student's familiarity with terms and chemical process.

## 0094 — Fundamental Physics (4)

This course is designed for those students with an inadequate background in math or physics. This course should be taken by those students before taking Physics 114. Several physics topics and the mathematical methods to study these topics are covered. Topics include metric system, unit conversion, and vector analysis of forces and motion. An introduction to laboratory procedures and report writing is included.

## 0095 — Study Techniques (4)

This is a freshman reading and study skills course. The purposes of the course are (1) to aid the student in building effective habits for study and learning, (2) to allow the student to diagnose his own weaknesses and work to correct them, and (3) to alert the student to some techniques of successful study.

The following courses have been developed as special interest courses for students attending Shawnee State General and Technical College. While credit may be awarded by Shawnee State for each of the listed courses, it is *important* to note that students may experience difficulty in transferring credit earned in *Student Service Courses* to another college or university. This difficulty arises primarily because of the nature and the type of material covered in each of the various courses.

The primary purpose of the Student Service Courses is to aid students in the development of skills and knowledge applicable to their educational pursuits while attending Shawnee State General and Technical College.

## SSCr 0002 — New Approaches to Learning (1)

Various approaches to learning are explored. Mnemonic and associative techniques are investigated. (2 hrs. lec. per week for 5 wks.)

## SSCr 0004 — Reading Development (1)

Emphasis is placed on improving reading speed and comprehension. Reading problems are identified and attacked: single word fixation, involuntary regression, subvocalization, and inability to concentrate. (2 hr. lec. per wk. for 5 wks.)

## SSCr 0006 — Vocabulary Development (1)

Emphasis is placed upon development of skills necessary for building vocabulary. (2 hrs. lec. per wk. for 5 wks.)

## SSCr 0008 — Use of the Slide Rule (1)

Basic fundamentals of the use and application of the slide rule. (2 hrs. lec. per wk. for  $5\ wks.$ )

## SSCr 0010 — College Orientation (1)

A basic introduction to college. Various areas are explored including: role of an advisor, student services, financial aid, and extracurricular activities. (2 hrs. lec. per wk. for 5 wks.)

Please note that developmental courses do not apply toward an associate degree.

## COURSE DESCRIPTIONS

## **ACCOUNTING**

## Acct 0101 — Accounting I (4)

Introduction to fundamental accounting concepts and the procedures. The accounting cycle: nature of accounts and techniques of recording, classifying, summarizing and analyzing basic financial data. Application of fundamental accounting techniques to partnerships and corporations. Accounting for the formation, operation, and dissolution of business enterprises.

## Acct 0102 — Accounting II (4)

Prereq. Acct 0101.

Application of fundamental accounting techniques for cash, long term investments, notes and accounts, inventory methods, plant and equipment, and liabilities. Introduction to manufacturing operations, cost methods and management's need of cost data.

## Acct 0103 — Accounting III (4)

Prereq. Acct 0102.

Reporting and analysis of financial data. Financial statement introduction, analysis and interpretation to meet the needs of modern management. Introduction to accounting techniques applicable to parent and subsidiary companies and departmental and branch operations. Budgeting as an aid to management, and the importance of income tax considerations in financial decisions.

## Acct 0104 — Tax Accounting (4)

Current income tax law and regulations related to business and individual income tax reporting. Practice in preparation of tax returns of businesses and individuals.

## Acct 0205 — Principles of Finance (3)

Forms of business organization; corporate securities, financing through securities, sources and management of working capital, administration of income, expansion and combination, re-organization receivership, and dissolution.

## Acct 0211 — Intermediate Accounting I (4)

Prereq. Acct 0103.

A more advanced treatment of accounting theory; determination of income realization and cost expiration. Primary emphasis is on asset accounts in order listed on the balance sheet.

## Acct 0212 — Intermediate Accounting II (4)

Prereq. Acct 0211.

Continuation of Intermediate Accounting I with emphasis on the balance sheet sections dealing with investments, fixed assets and liabilities.

## Acct 0213 — Intermediate Accounting III (4)

Continuation of Intermediate Accounting II with a detailed study of the owner's equity section of the balance sheet and the financial statements presentation and analysis.

## Acct 0221 - Cost Accounting I (4)

Prerea. Acct 0103.

Introduction to cost accounting systems and methods. Cost concepts, classifications, and measurement techniques in relation to their importance in determination, planning, and control. Job order and process cost accounting methods.

## Acct 0222 -- Cost Accounting II (4)

Prereq. Acct 0221. Estimating, planning, and controlling the costs of processes and projects. Standard cost accounting procedures and the analysis of variances. Cost and profit responsibility reporting to management. Uses of cost and profit data in project selection, product pricing, and other functions of management.

## Acct 0241 — Auditing (3)

Prereq. Acct 0212 and 0221.

Independent audits, professional ethics, legal liability, internal control, auditing standards, work sheet applications and procedures. Concern will be given for audit evidence, the auditor's approach and techniques, summary reports, statistical sampling, and role of advisory services to management.

## Acct 0242 — Business Communications (3)

Principles and techniques of effective letter writing; letter mechanics; writing of personal business letters including application letters; methods of writing business reports and letters — internal and external reports as means of communication.

## Acct 0251 — Systems Accounting (3)

Developing, organizing, and using accounting data, analyzing and improving accounting systems, systems reviews, flow process charting, structural flow charting, internal check, internal control, forms and paper flow analysis.

#### **ANTHROPOLOGY**

#### Anth 0201 — Introduction to Anthropology (5)

Basic concepts; nature of cultural diversity; evolution of sociocultural systems.

#### Anth 0250 — Ethnology (4)

Prereg. 201.

Cross-cultural survey of structure and process in various cultures; includes consideration of kinship, economics, politics and ideology.

#### **ART**

#### Arts 0100 — Fundamentals of Visual Arts (4)

No Prereg.

A highly structured course that contains an introductory format for the art department as well as the basic vocabulary necessary for participation in any aspect of the visual arts. Required of all freshmen with an art concentration.

#### Arts 0101 — Studio Foundations I (4)

No Prereg.

This course is required of all freshmen with an art concentration. The focus of the course will be on the basics of drawing and two-dimensional design.

#### Arts 0102 — Studio Foundations II (4)

No Prerea.

This course is required of all freshmen with an art concentration. The focus of this course will be color and color theory.

#### Arts 0103 - Studio Foundations III (4)

No Prerea.

This course is required of all freshmen with an art concentration. The focus of this course will be three-dimensional design, introduction of materials and techniques of sculpture.

#### Arts 0201 — Art for the Elementary School I (3)

This course will be concerned with presenting art methods and ideas specifically geared to those teachers in elementary education.

#### Arts 0202 — Art for the Elementary School II (3)

Continuation of modern art approaches in the elementary school.

#### Arts 0215 — Drawing (3)

Prereg. Art 101, 102.

This course will start where the studio foundation series leaves off and explore the various drawing mediums in more detail.

#### Arts 0221 — Painting I (4)

Prereq: Art 101, 102.

The main concern of this course will be concentrated on the use of oils and synthetic painting media.

#### Arts 0222 — Painting II (4)

Prereq. Art 202.

A continuation and expansion of ideas and conceptualizations gained through Art 202.

#### Arts 0223 - Painting III (4)

Prereg. Art 203.

A further expansion of ideas and conceptualization combined with technical insights gained through the previous two courses.

#### Arts 0231 - Ceramics I (4)

The focus of this course will be clay as the craftsman conceptualizes it. Work in all types of handbuilt pottery, raku pottery, clays and glazes.

#### Arts 0232 — Ceramics II (4)

Prereq. Art 231.

This course will be a continuation of Art 231 but introducing the potter's wheel as a means of utilizing clay. Glaze formulation and usage will be covered briefly.

#### Arts 0233 -- Ceramics III (4)

Prereg. Art 232.

This course will be a more in-depth continuation of the previous ceramics courses with more stress being placed on the craftsmanlike development and conceptualization of clay as a medium.

#### Arts 0240 - Sculpture (4)

Prereg. Art 101, 102, 103.

Students will be expected to work in at least 2 separate mediums coming to a more thorough understanding of those mediums through their use.

#### Arts 0245 — Printmaking I (4)

Prereg. Arts 101, 102, 103.

An introduction to basic intaglio techniques. Emphasis will be on mastering techniques so that they can be used to develop ersonal imagery.

#### Arts 0246 — Printmaking II (4)

Prereq. Arts 245.

An introduction to lithographic technique and printing. Emphasis is placed on mastering techniques so that they can be used to further personal aesthetic goals.

#### Arts 0247 — Printmaking III (4)

Prereg. Arts 246.

An introduction to the basic skill screen techniques. Emphasis will be on mastering techniques so they may be used to develop personal imagery.

#### Arts 0251 — Graphic Design - Typography (4)

Prereg, 101, 102, 103.

Typography as a designer's tool and as communication. Emphasis upon design of symbols and typefaces.

#### Arts 0252 - Graphic Design - Illustration (4)

Prereg. Art 101, 102, 103,

Pictorial imagery as a design tool. Problems in product, poster, magazine and book illustration.

#### Arts 0253 - Graphic Design - Three-Dimensional (4)

Prereg. Art 101, 102, 103,

Examination of three-dimensional design problem with special attention to environments, packaging and display.

#### Arts 0261 - Art History I (4)

The Art History courses are designed to acquaint the student with a knowledge of the contexts of work of art and the continual discarding and rediscovery of values in that art. Course I covers ancient through 14th century.

#### Arts 0262 - Art History II (4)

This course maintains the same general purpose and objective as Art 261 (see above) but covers the 15th through the 19th century.

#### Arts 0263 - Art History III (4)

This course maintains the same general purpose and objective as Art 261 and 262 but covers the 20th century.

#### Arts 0271 — Life Drawing I (4)

Prereg. Art 101.

Drawing the human figure in various media.

#### Arts 0272 — Life Drawing II (4)

Prereg. Art 271.

A continuation of Art 271.

#### Arts 0273 - Life Drawing III (4)

Prereg. Art 272.

A continuation of Art 272.

#### Arts 0280 — Topics in Art (2/3)

Study of the various art topics otherwise not available to students.

#### Arts 0290 — Weaving I (4)

Prereg, Arts 101, 102, 103.

Introduction to weaving techniques through the construction and use of a simple loom and the use of the table or floor loom.

#### Arts 0291 — Weaving II (4)

Prereq. Arts 290.

Further examination and use of the 4-harness loom (2 credits). Offloom fibre techniques and the design, construction and use of hand looms (2-4 credits).

#### **BANKING AND FINANCE**

#### BaFT 0101 — Principles of Banking and Finance I (3)

Monetary standards, commercial and central banking. Federal Reserve functions and statements, monetary and income theory, problems of monetary and fiscal stabilization, international payments, and the International Bank and Monetary Fund.

#### BaFT 0102 — Principles of Banking and Finance II (3)

A study of banking operations and management. Course is designed as an introduction to the administration and operation of commercial banks and saving and loan banks. Management of banking funds with liquidity. Investment characteristics of securities. Analysis of objectives, risks, yields, and outlets for individual and institutional funds.

#### BaFT 0103 — Fundamentals of Data Processing (3)

Introduction to the theory of punch card equipment. Exercises in interpreting, reproducing, collating, and basic accounting machine functions, together with utility program use.

#### BaFT 0104 — Insurance I (2)

An introductory course covering principles and types of insurance, types of companies, rating classification, claims disposition, agents and agencies, and governmental regulations.

#### BaFT 0105 — installment Credit (3)

Procedures, forms, government regulations, delinquency and collections, interest rates, background of installment credit.

#### BaFT 0106 — Principles of Bank Operations (3)

Basic course stating a history of banking, developing of Federal Reserve System; three main duties, safekeeping, transfer of funds, lending. Examination and governmental examination. Field work and problems concerning the operation of commercial bank and savings and loan institutions. On the job visitation to various banks.

#### BaFT 0111 — Banking and Finance Internship (6)

Eleven weeks of supervised work experience with supervisory visits by the instructor. Weekly seminars for critique of experience. Weekly evaluation reports.

#### BaFT 0112 — Special Problems in Banking & Finance (2)

Weekly evaluation report.

## BaFT 0201 — Residential Appraising (3)

A course that covers the basic appraisal principles and practices with specific reference to the operations of savings associations. The appraisal terminology, the study of national, regional, local and neighborhood trends, the study of site, the methods of arriving at value estimates and the processes involved in studying the market are just some of the topics covered. Field work in the area of appraising.

#### BaFT 0202 — Home Mortgage Lending (4)

A course covering the basic principles of home mortgage lending. A study of the procedures use from the opening to closing of mortgages. A complete study of all necessary forms, rules, and regulations the buyer should know in obtaining a loan.

#### BaFT 0203 — Valuation of Real Estate (3)

This course includes a review of basic residential appraising, the development and operation of an appraising department, building cost analysis, market analysis, land development appraising and some of the more specialized appraising problems. Apartment units and buildings, commercial properties, special purpose properties, office buildings, shopping centers, motels and hotels are all studied in this course.

#### BaFT 0204 -- Investments I (4)

A course consisting of assignments dealing with the various investment alternatives, as well as general and specific information that must be considered before thought is directed toward particular industries and companies. Also included are the tools and sources that are needed for the analysis necessary before making wise investment decisions.

#### BaFT 0205 — Personnel Management (3)

The philosophy, principles, and the methods of personnel management; organizational structure, areas of responsibility and authority, policy making, procurement and placement, training, evaluation, wage and salary administration and benefits programs.

#### BaFT 0206 - Investments II (4)

Part II of this course is more analytical and involves the actual art of investing. It proceeds from an analysis of the needs and the determination of objectives to the careful analysis and selection of industries and securities appropriate for realizing those objectives.

#### BaFT 0207 — Mortgage Loan Servicing (3)

Servicing systems, regulations, reports, records, accounting procedures, loan participations and the sale of loans are just a few of the topics covered in this course. It can be a most helpful course, specifically to those involved in the lending activities of the association, and generally to all those working for a savings association.

#### BaFT 0208 — Supervision of Personnel Administration (3)

Training of all new employees, and supervision of the physical facilities.

#### BaFT 0209 — Seminar in Consumer Finance (1)

Problem to be selected in consultation with an assigned instructor.

#### **BIOLOGICAL SCIENCES**

#### Biol 0105 — Field Biology (3)

Introduction to identification and natural history of our local flora and fauna, with a biotic community approach. Fresh water biology. 2 lec. 4 labs.

#### Biol 0107 --- Human Ecology (4)

Effect of man on ecosystem, including pollution and population relationships. Emphasis on drugs, their abuse, their pharmacology and recent research findings on effects of drugs on humans. Reproduction physiology, contraceptive technology and research, biological aspects of abortion and venereal disease. 3 lec. 2 labs.

#### Biol 0111 — Principles of Biology (5)

Introduction to principles and concepts of life; emphasis on interrelationships of structural, functional, reproductive, evolutionary and ecological principles related to cells and organisms. 4 lec. 2 labs.

#### Biol 0112 — Plant Biology (5)

Prereg. Biol. 111.

Morphology and anatomy of seed plants as related to function. Survey of plant kingdom with emphasis on evolutionary relationships and life histories of selected plant groups. 4 lec. 2 labs.

#### Biol 0113 -- Animal Biology (6)

Prereq. Biol. 111.

Principles of development, anatomy, physiology, behavior and laboratory survey of major phyla. Designed primarily for majors in the sciences and preprofessional students. 4 lec. 4 labs.

#### Biol 0121 — Biology, Plants and Man (4)

Prereq. Biol. 111 suggested.

Interrelationships of plants and man from both historical and modern points of view, origins of agriculture and civilization, tropical and temperate food plants, medicinal plants, drug plants, destruction of environment and its ultimate effect on food plants. 4 lec.

#### Biol 0200 — Human Anatomy and Physiology (4)

A general survey of the structure and function of the human body. Not applicable for students requiring biology 0290 and 0291. 3 lec., 3 lab.

#### Biol 0210 - Trees and Shrubs (5)

Prereg. Biol 112 (fall quarter).

Collection, identification, nomenclature, classification, ecological relationship of native, introduced and cultivated woody plants. 3 lec. 4 labs. 2 Saturday field trips.

#### Biol 0211 - Spring Flora (5)

Prereg. Biol 112.

Identification, nomenclature, classification of spring flowering plants. Origin and evolution of flora of Ohio. 3 lec. 4 labs.

#### Biol 0215 — Ecology (3/5)

Prereq. Biol 112 or permission.

Effect of environmental factors as related to structure and function of plant and animal communities, 3 lec. 4 labs. Saturday field trips.

#### Biol 0225 — General Genetics (5)

Prereg. Biol 111.

Principles and concepts of genetics as revealed by classical and modern investigation. 5 lec.

#### Biol 0235 — Microbiology (4/5)

Prereg. Biol 111 or permission.

A survey of representative types of micro-organisms. Emphasis is placed on cellular structure and physiology, nutritional and environmental requirements and methods of reproduction. Introduction to the role of pathogenic organisms in carrying diseases and infections. Principles of immunity and resistance to disease. Laboratory includes methods of sterilization, culture, staining and identification. 3/4 lec. 3 labs.

#### Biol 0290 — Principles of Anatomy and Physiology I (4/5)

Prereq. Biol 111 or permission.

Morphological and physiological aspects of **cells and tissues** and of the dermal, neurosensory, skeletal, and muscular systems of the human body. 3/4 lec. 3 lab.

#### Biol 0291 — Principles of Anatomy and Physiology II (4/5)

Prereq. Biol 290.

Continuation of Biol 290. Morphological and physiological aspects of the circulatory, respiratory, digestive, urinary, reproductive, and endocrine systems. 3/4 lec. 3 lab.

#### Biol 0299 — Special Topics in Biology (2/3)

Prereg. Biol 111 or permission of instructor.

Individual or small-group study, under supervision of instructor, of topics not otherwise available to students.

#### **BUSINESS LAW**

#### BusL 250 — Business Law I (4)

Introduction to major points of business law, based principally on Uniform Commercial Code; consideration of Uniform Acts relating to specific legal areas. Contracts, agency and employment, negotiable instruments, personal property, and bailments.

#### BusL 0260 — Business Law II (4)

A second quarter of the study of Business Law in which the subject matter covered includes partnerships, corporations, real property and leases, nature of insurance, mortgages, nature of bankruptcy, trusts and estates, and basic business regulations by government.

#### **CHEMISTRY**

#### Chem 0101 -- Introduction to Chemical Technology (3)

The application of physical and chemical principles to problems in the chemical industry. Introduction to terminology, use of graphical methods, data acquisition techniques, and computation equipment and process methods.

#### Chem 0121 — Introduction to Inorganic Chemistry (4)

An introductory course in fundamental chemical concepts and laboratory techniques. Atomic structure, periodic classification of elements, chemical equations, chemical calculations, solutions, acids and bases, oxidation, reduction, reactions, and the gas laws. 3 lec. 3 labs.

For students in engineering and technology (except chemical engineering), education (except science modular program), nursing, technical programs in all allied health fields, and all other programs requiring only 1 year of chemistry.

## Chem 0122 — Introduction to Organic Chemistry (4)

Prereq. Chem 121.

A course in fundamental organic chemistry. The study of carbon compounds; aliphatic hydrocarbons, alcohols, ethers, aldehydes. ketones, organic acids, esters, amines, and aromatic compounds. An introduction to carbohydrates, lipids, and proteins. Recommended for students in engineering and technology (except chemical engineering), education (except science modular program). nursing. technical programs in allied health fields, and all other programs requiring only one year of chemistry. Related laboratory. 3 lec. 3 labs.

#### Chem 0123 — Bio-Chemistry (3)

Prerea. Chem 122.

This course is an introduction to physiological chemistry with a short review of organic chemistry. Metabolism of carbohydrates, lipids, and proteins is discussed with emphasis on metabolic pathways, enzymes, hormonal control of metabolism, metabolic energy for muscular work, composition of body fluids, and metabolic relationships among major organs. Pathological conditions related to metabolism are discussed. Recommended for students in technical programs in allied health fields (except nursing). (3 hours lecture)

## Chem 0124 — Environmental Chemistry (4)

Prereg. Chem 121.

Recommended for students in engineering (except chemical), industrial technology, education (except science modular program), and others not in the allied health fields needing one year of chemistry. Introduction to descriptive inorganic chemistry through study of solutions and concept of equilibrium. Emphasis placed upon various aspects of pollution (air, water, radiation, and solid waste) and their relationship to natural resources. 3 lec. 3 labs.

## Chem 0141 — Chemistry I: General (5)

Prereq. h.s. algebra and h.s. chemistry recommended.

Designed to provide an introduction to chemistry through the study of atomic theory, periodic classification, atomic and molecular structure, nuclear chemistry, chemical bonding, and the states of matter. 4 lec. 3 labs.

Recommended for chemistry, preprofessional (medicine, optometry, microbiology, dentistry, forestry, pharmacy, veterinary), chemical engineering, medical technology, botany, zoology, physics, and secondary education (science modular program), plastics technology, and chemical technology programs.

## Chem 0142 — Chemistry II: Chemical Energetics (5)

Prereg. 0121 or 0141.

Designed as an introduction to chemical thermodynamics, chemical equilibrium, chemical kinetics, and solution chemistry. Emphasis placed upon problem solving. 4 lec. 3 labs.

## Chem 0143 — Chemistry III: Quantitative Analysis (5)

Prereq. Chem 0142 or permission.

Designed as an introduction to ionic equilibrium, electrochemistry, and quantitative analysis by gravimetric and volumetric techniques. Emphasis placed upon analytical procedures and problem solving. 4 lec. 3 labs.

## Chem 0202 — Process Instrumentation (4)

Prereq. Math 131, Physics 202, PEng 0206 Introduction to measurement and control systems for temperature, pressure, and fluid flow. Dynamic response characteristics of instruments and calibration methods.

## Chem 0203 — Pollution and Abatement (3)

Prereg. Chem 0121 and 0143.

Problems, philosophies, principles and methods of water pollution abatement in the environment. Source of pollution, their effects, and chemical principles as applied to overcoming water pollution. State and Federal regulations. Sources and dispersion of air pollutants, air pollution control, monitoring methods. Emission standards, and State and Federal regulations and ordinances.

## Chem. 0205 — Organic Chemistry (4)

Prereg Chem 0143.

A course for students wishing to acquire a sound knowledge of classical and modern organic chemistry. 3 lec. 3 labs.

## Chem 0206 — Organic Chemistry (4)

Prereg. Chem 0205.

Continuation of 205. See 205 course description. 3 lec. 3 labs.

## Chem 0207 — Organic Chemistry (4)

Prereq. Chem 0206.

Continuation of 205-206. See 205 description. 3 lec. 3 labs.

## Chem 0211 --- Unit Operations I (3)

Prereg. Math 131 and PEng 0206.

Fundamentals of distillation, filtration, drying extraction, mixing, absorption, etc. Related laboratory.

## Chem 0212 — Unit Operations II (4)

Prereq. Chem. 0211.

Continuation of Unit Operations I. Fundamentals of heat transfer, mass transfer, fluid flow, and related laboratory experiences.

## Chem 0225 — Instrumental Methods of Aalysis (4)

Prereq. Chem 0143.

Analytical chemistry course for students not majoring in chemistry, which emphasizes application of instrumental methods to solution of problems in chemical analysis. 3 lec. 3 labs.

## **CIVIL ENGINEERING**

## CEng 0101 — Introduction to Surveying (3)

Surveying and its applications; the surveying method. Introductory topics in plane geometry, trigonometry, and computations to prepare the student for plane surveying. Introductory discussions and lectures on surveying equipment, nomenclature, general field procedures, cleaning and care of instruments, and to give the student an overview of the surveying profession.

#### CEng 0111 — Surveying I (3)

Prereq. CEng 0101 or advisor approval.

Setting up the transit; use of the transit, turning angles, prolongation of a straight line; setting up the level; running circuits of levels; horizontal measurement; tape corrections; keeping field notes.

## CEng 0112 — Surveying II (3)

Prereq. CEng 0111.

Leveling procedures; establishing line and grade for construction; topographic surveying, traverse and traverse computations; the elements of the use of aerial photographs.

## CEng 0113 — Route Surveying I (3)

Prereq. CEng 0112.

Transportation systems; route surveys by ground and aerial methods; circular curves; compound curves; parabolic curves.

## CEng 0114 — Route Surveying II (3)

Prereq. CEng 0113.

Transition spiral, spiraled compound curves, elements of highway safety and design, drainage surveys; field application of route surveys.

## CEng 0115 — Surveying for Civil Engineers (3)

Prereq. CEng 0114.

Advanced surveying methods. Triangulation systems. Details of new surveying procedures; aerial surveys, the telerometer, the geodimeter, precision survey instruments and methods.

## CEng 0201 — Concrete Design (4)

The theory of modern concretes. Practices of making, placing, and curing Portland cement and asphaltic concretes. Design of batches, testing of compounds, and testing of specimens of concrete.

## CEng 0202 — Civil Engineering Law (2)

A study of those phases of law directly associated with the Civil Engineering field. Contracts, specifications, construction documents, responsibility, negligence.

#### CEng 0203 - Statics (3)

Prereq. Math 0131.

Statics is the study of external forces acting on rigid bodies in equilibrium. The study includes types of forces, reactions, vectors, moments. The laws governing the actions and resolutions of these forces.

## CEng 0204 — Construction Supervision (3)

Prereq. CEng 0211 or advisor approval.

A study of construction bidding, planning, scheduling, and controlling. The critical path method (CPM) is used.

## CEng 0205 — Hydraulics for Civil Engineering (2)

Prereq. Math 0131 and Phys 0201.

This course is oriented toward water supply and distribution. Topics include Pascal's Law, Bernoulli's Theorem, flow of water in pipes, distribution systems, and pumps.

## CEng 0206 — Engineering Problems and Field Inspection (1)

Actual field visitations, office computations; use of office machines, reducing field notes, report forms, state and federal interpretation of highway code.

## CEng 0207 — Strength of Materials I (3)

Prereq. CEng 0203 and CEng 0205.

The study of tension, compression and shear stress, deformation, engineering materials, torsion, centroids and moments of inertia of areas.

## CEng 0208 — Soil Materials and Testing (3)

Prereq. CEng 0201 or advisor approval.

Engineering tests of soils for design and control to meet ASTM Standards. Testing for moisture content, standard compaction, proctor penetration, sieve analysis, hydrometer analysis, and unconfined compression.

## CEng 0211 — Highway Construction ! (4)

Highway economics and finance, highway planning, geometric design of highways, drainage, and drainage structure. Traffic survey, driver and vehicle characteristics. Traffic routing, safety.

## CEng 0212 — Highway Construction II (4)

Prereq. CEng 0211.

Advanced. Earthwork operations and equipment; thickness design of flexible pavements and bases; soil aggregate roads and stabilization; bituminous surface treatments; highway maintenance.

## **COMPARATIVE ARTS**

#### ComA 0101 — Survey of the Arts (3)

Team taught. Analysis of form, media, and content of major arts stressing interrelationships of architecture, dramatic art, music, literature and painting through recognition of common art factors. Use of tapes, slides, and recordings. Three quarter sequence.

#### ComA 0102 — Survey of the Arts (3)

Team taught. Analysis of form, media, and content of major arts stressing interrelationships of architecture, dramatic art, music, literature and painting through recognition of common art factors. Use of tapes, slides, and recordings.

#### ComA 0103 — Survey of the Arts (3)

Team taught. Analysis of form, media, and content of major arts stressing interrelationships of architecture, dramatic art, music, literature and painting through recognition of common art factors. Use of tapes, slides, and recordings.

#### CORRECTIONS

## CorT 0101 — Introduction to Corrections (3)

This course will allow a person an opportunity to study the history of corrections, concepts of treatment versus punitive measures, and to have an understanding of the objectives of corrections.

## CorT 0102 — Criminology (3)

This course will allow the student an opportunity to have a comprehensive understanding of criminal activity in America and how various controls affect the criminal behavior of our society.

## CorT 0103 — Juvenile Delinquency (3)

This course will cover an in-depth study of juvenile delinquency, prevention of delinquency, interpretation of the role of society, and the administration of juvenile justice.

#### CorT 0104 — Criminal Law (3)

A study of the principles of criminal law with emphasis upon their application in Ohio criminal proceedings, from offense report through arrest and trial.

#### CorT 0105 — Probation and Parole (4)

This course will provide an opportunity for a student to study the why, how, and when of probation and parole. The course will provide an understanding of what one could look forward to in the future in relation to probation and parole.

## CorT 0106 — Constitutional Law (3)

A general overview of the U.S. and Ohio constitutions with special emphasis upon application of current interpretation appropriate to the criminal justice system and corrections operations.

## CorT 0107 — Philosophy of Corrections (2)

A study of correctional philosophy is intended to aid the correction officer in understanding the organization of which he is a part, and to enhance consistency of job performance.

#### CorT 0111 - Internship (6)

This course will provide the student with on-the-job training.

## CorT 0112 — Special Problems (2)

This course will be held by special arrangement with an instructor in the student's particular technology. It will provide an opportunity for individual research in the student's major area of study.

## CorT 0201 — Correctional Interview and Counseling Techniques (3)

A study of interviewing and counseling techniques, in general, and their specific applications to corrections. Some special problems to be considered are: the involuntary client, independence in the closed setting, and relationship building.

### CorT 0202 — Drug Abuse (3)

This course will deal with identification of users, effects of drugs, rehabilitation of drug users, and the role of an institution in combating the internal drug abuse problem.

## CorT 0203 — Correctional Psychology (4)

Psychology dealing with problems with predominant to the personalities entering a correctional facility. Level quay psychology - psychoanalytic. He will be expected to know where the various approaches are being used and be required to study one of them in depth.

## CorT 0204 — Correctional Law (5)

This course will allow the student to have an understanding of constitutional, criminal, and correctional law. He will study how interaction of these laws control our human behavior.

## CorT 0205 — Group Interaction (3)

A three-credit course, the purpose of which is to introduce students to the complexities of interpersonal relationships. The prerequisite in Introduction to Psychology. Students will meet as a group on a regular basis in order to exchange ideas about themselves and others. The aim of the course is for students to gain a greater understanding of themselves, to increase their sensitivity to others, and to facilitate communications.

## CorT 0206 — Correctional Case Evaluation (5)

This course will allow a student to first select a certain type of criminal case. Then he will have an opportunity to meet with the individual who is connected with the case and develop a program, along with his supervisor, which would provide an opportunity for rehabilitation.

## CorT 0207 — Observation Techniques (2)

This course will teach an individual how to observe, how to interpret what he is observing, how this would be used in the rehabilitation process, and the value of observation in relation to institutional security.

## CorT 0208 — Correctional Programs (5)

This will deal with all of the programs which the correction field uses in its systems — treatment, social services, pre-release, religion, discipline, visitation, education, etc.

## CorT 0209 — Research Appreciation in Corrections (5)

The student will select a research project in relation to correction. He will develop the project and explore the various methods of research that would be associated with the project.

## CorT 0210 — Principles of Leadership (4)

This course will help officers evaluate their own understanding of human relations and pinpoint areas of strength and weakness in relationship with leadership skills: How to understand the drives that motivate man in his work; how to praise, how to reprimand, how to handle disciplinary problems, and techniques of communicating ideas.

## CorT 0212 — Community Programs (5)

This course will explore the programs which could bring together the institution and the community, so each would be able to identify its role and understand how, by uniting forces, the rehabilitation process would be expedited.

## **DATA PROCESSING**

## EDPT 0101 — introduction to Data Processing (4)

Basic concepts and overview of computer technology fields, topics include historical development, generations, and classification of computers, flow-charting techniques, algorithms, brief introduction to high level and low level languages, system software and hardware organizations, and computer applications. Prerequisite for all subsequent data processing courses.

## EDPT 0102 — Introduction to Data Processing (For Non DP Majors) (3)

Basic concepts and overview of data processing; topics include historical development, generations of computers, flowcharting techniques and an introduction to a high-level programming language (COBOL).

## EDPT 0103 — Basic Computer Concepts (3)

Basic concepts and overview of computer technology fields; topics include classifications of computers, algorithms, system software, hardware and logic, number systems, simplification techniques, half adders, adders, shift registers, counters and other operational networks.

## EDPT 0104 — Computer Fundamentals and Procedures (3) (For Non DP Majors)

Prereq. DP 101.

COBOL programming techniques and applications; topics include construction and use of flowcharts, COBOL coding methods, data processing and file manipulation. Laboratory problems to be solved using the computer.

## EDPT 0111 — Computer Fundamentals I (4)

Prereq. DP 101.

Basic assembly language programming method; topics include computer organization, assembly process, assembly coding, addressing, binary arithmetic, subroutine linkage, looping and address modification.

## EDPT 0112 — Computer Fundamentals II (4)

Prereq. DP 301, DP 302.

More advanced assembly language programming techniques, macros, macro generation program linkage, job control language, and case studies.

## EDPT 0221 — Systems Programming and Lab I (5)

Introduction to the basic rules of COBOL. Using COBOL to produce various business reports with complete documentation on each program.

## EDPT 0222 — Systems Programming and Lab II (6)

A deeper study of COBOL using tables, internal sorts, and a variety of different commands. An introduction to different methods of accomplishing programming problems and when each method could be used.

## EDPT 0223 — Advanced Programming (5)

A complete individual program, different for each student, based on the system analysis project produced by the System Analysis course. Methods of saving memory and increasing speed will be developed.

## EDPT 0231 — Systems Analysis (4)

Various considerations inherent in designing a business system, file design, use of proper controls. Principles of form design for source documents and printed outputs. Investigation and evaluation of various systems with the goals of producing a new automated system.

## EDPT 0241 — Systems Accounting DP Applications (3)

A study of the collection, processing, and interpretation of materials costs, labor costs, and marketing costs, including case studies which illustrate the objectives and role of the computer in cost accounting systems.

## EDPT 0251 — Case Study - Computer Systems (5)

Analysis of present information flow, system specification, and equipment selection, implementation of the system. An individual study with written and verbal reports of different equipment and different languages.

## **DENTAL HYGIENE**

## DtHy 0101 — Radiology (3)

History and development of the x-ray, its nature and properties. Safety precautions and uses of the x-ray in dentistry. Theory and practice in the fundamentals of oral radiographic techniques. Film placement, tube angulation, processing and mounting of films. Instruction on reading radiographs and normal/abnormal things which would be seen. A specific number of radiographic examinations and hours in darkroom procedures are required throughout the two-year Dental Hygiene program.

## DtHy 0102 — General and Oral Histology and Embryology (3)

Study of development of tissues and structures from a histological and embryological basis. Emphasis on development of the tissues of the teeth, and other oral structures and their functions. A thorough understanding is necessary for subsequent courses: Pathology, Periodontology, Radiology, etc.

#### DtHy 0103 - Dental Materials (5)

Physical properties of materials used in dentistry and basic principles of their preparation and use. Techniques for using restorative materials, impression materials, and laboratory procedures. In a laboratory setting, students learn techniques in working with the various types of dental materials.

## DtHy 0111 — Head & Neck Anatomy i (2)

Detailed study of the anatomy of the head and neck. Special emphasis is made toward the face and jaws. Cranial skeleton with emphasis on facial bones. Muscles of the head and neck: functions, nerve and blood supply. Detailed study of the circulatory system. Lymphatic drainage; importance and anatomy. Temporomandibular joint; function and anatomy. Detailed study of topographical and functional anatomy of oral cavity and pharynx.

#### DtHy 0112 — Head & Neck Anatomy II (2)

A further study of the anatomy of the head and neck. Emphasis is placed on nerve supply, salivary glands, fascia and planes of the head and neck region.

#### DtHy 0113 - Tooth Morphology I (1)

Study of evolution of tooth form, physiology and fundamentals of tooth form, supporting structures of the teeth and positions and relationships to other structures of oral cavity. The primary dentition is discussed thoroughly and comparisons made with the permanent teeth. The permanent dentition is then studied in general. Laboratory includes drawings of permanent teeth, and identification of extracted teeth.

## DtHy 0114 - Tooth Morphology II (1)

A further study of tooth form and mechanisms of the dental apparatus. More emphasis is placed on carving selected teeth from wax to understand anatomy and contours, and identification of extracted teeth.

## DtHy 0121 — Clinical Dental Hygiene I (4)

The introduction to the professional including History & Development of Dental Hygiene; medico-dental terminology; principles of preventive dentistry, the roles of plaque, nutrition, fluoride; principles and methods of patient education plaque removal and control; the prevention of disease transmission; study etiology of the formation of calculus and stains; diagnostic data collection; guidelines for professional appearance; patient/operator positioning, basic instrumentation, design and construction of instruments and instrument sharpening; lab practice on typodonts for manual dexterity in the control and use of instruments and the transferring of acquired skills to a living subject.

## DtHy 0122 — Clinical Dental Hygiene II (4)

The hygientist's role in dental hygiene patient care which includes the objectives for the practice of dental hygiene care, the introduction to general clinic routines and importance of complete patient records and screening techniques. Skills practices included are detection of hard and soft deposits, scaling and polishing techniques, study of occlusion, study casts, charting, techniques of fluoride application, oral hygiene assessment, patient education and management techniques, and medical and dental emergencies.

### DtHy 0123 — Clinical Dental Hygiene III (4)

A continuation and review for the application of previously learned techniques and procedures of dental hygiene care and services in the clinic atmosphere that the dental hygienist could perform in practice. Advanced skills include desensitization, use of cavitron, use of radiographs in evaluation and charting, principles of sit-down four-handed dentistry and the handling of patients with special needs and problems.

## DtHy 0124 — Clinical Dental Hygiene IV (6)

A continuation of Clinic III techniques and procedures; dental office practice management and special seminars.

#### DtHy 0125 - Clinical Dental Hygiene V (5)

A continuation of clinic procedures and practices with further study in nutritional counseling, legal and ethical factors involved in the profession, special seminars on dental specialties, expanded duties, and extra-mural clinic assignments.

#### DtHy 0126 — Clinical Dental Hygiene VI (5)

The continuation of clinical procedures in the delivery of dental hygiene care. Advanced clinical techniques and seminars are included.

## DtHy 0127 — Clinical Dental Hygiene VII (5)

Complete dental hygiene care involving patient case reports; seminars.

## DtHy 0201 — General and Oral Pathology (3)

An introduction to pathology. Processes of inflammation, necrosis, retrograde changes and wound healing are discussed. Etiologies, diagnosis, treatment and prognosis of oral lesions are discussed. Clinical pathology of diseases affecting teeth and their supporting structures. Visual aids are used to study oral lesions and their clinical manifestations.

## DtHy 0202 — Periodontics (3)

A study of the periodontal tissues which surround and support the teeth. Etiologies and classifications of periodontal disease. Treatments and principles of periodontics are discussed.

#### DtHy 0203 — Nutrition (3)

A study of normal nutrition and its role in promoting good health. Includes composition and functions of foods, digestion and metabolism. Nutritional needs throughout the life cycle. Special emphasis placed on nutritional counseling.

## DtHy 0204 -- Pharmacology and Anesthesiology (4)

Drugs and anesthetics used and encountered in dentistry. Discussion of the origin, physical and chemical properties, effects on body systems, indications and contraindications for use, and method of administration and elimination.

## DtHy 0205 - Dental Health Education (3)

Analysis of concepts, techniques of presentation and goals of Dental Health Education. Major emphasis is placed on preparation and use of lesson plans and instructional materials for teaching dental education. Classroom instructions of dental health in Elementary and Secondary Schools.

#### DtHy 0206 — Public Health (3)

Historical development of public health practices in the United States as they relate to Dental Hygiene; present administrative organizations and their functions and services; exploration of present public health concepts.

## **ECONOMICS**

## Econ 0101 — Principles of Economics I (4)

Introduction to basic economic issues, terminology, and theory. Macro economics: including national income analysis, business cycles, role of institutions, and economic growth.

## Econ 0102 — Principles of Economics II (4)

Prereq. Econ 101.

Micro economics: the study of the development and application of basic tools of analysis, applied to the different forms of competition, income distribution, trade, and international payments.

## Econ 0206 — Consumer Economics (4)

The purpose of this is to help social services technology students become informed about buying, money management, and issues so that they can individually or collectively make changes which will strengthen the American market place.

### **EDUCATION**

### Educ 0101 — Introduction to Education (4)

An introductory study of the broad and complex field of education. Emphasis on professional and personal requirements for successful teaching.

### **ELECTRO-MECHANICAL ENGINEERING**

### EMng 0101 — Electro-Mechanical Devices (2)

Prereq. EMng 0112 concurrently or advisor approval.

An introduction to devices where both electrical and mechanical principles are utilized. The course content includes DC motors and generators, 3-phase circuits, transformers, induction motors, alternators, and synchronous motors.

### EMng 0103 — Electro-Mechanical Drawing (2)

Prereq. EnDr 0101 or advisor approval.

The study of mechanical drawing of both electrical and electronic circuits and components using electrical and electronic symbols. Drawing assignments include power distribution, logic diagrams, printed circuits, and schematics and pictorial views.

### EMng 0111 — Electrical Fundamentals I (3)

Prereq. Math 0130 concurrently or advisor approval.

An introductory course in the study of electricity. Basic definitions of energy and electricity are introduced which lead to studies of resistance, Ohm's law, series and parallel circuits, magnetism, simple meters, inductance, and capacitance. Direct current effects only are studied.

### EMng 0112 — Electrical Fundamentals II (4)

Prereq. EMng 0111 or advisor approval.

Simple inductance-resistance and capacitance-resistance transient circuits are initially studied. Studies of alternating current fundamentals, phasor algebra, AC circuit analysis, power factor, and resonance complete the course.

### EMng 0121 — Electronics I (4)

Prereq. EMng 0112 or advisor approval.

A modern introduction to discrete, bipolar solid state electronic devices and basic electronic circuits including small signal amplifiers, transistors biasing, equivalent circuits, electronic unregulated DC power supplies, and special solid state devices.

#### EMng 0122 — Electronics II (3)

Prereq. EMng 0121 or advisor approval.

Continuation of Electronics I. Frequency response, decibels, cascaded amplifiers, feedback amplifiers, power amplifiers, field effect amplifiers, unijunction transistors, control circuits, regulated DC power supplies, and solid state oscillators.

### EMng 0201 — Introductory Electro-Mechanical Systems (2)

Prereg. EMng 0112, 0101, 0121.

An introduction to systems which use both electrical and mechanical principles. Thermal, hydraulic, pneumatic, vacuum, magnetic and optic systems are utilized to stress the coordinated combination of previously learned concepts. A key course in the program.

### EMng 0202 — Mechanical Analysis (4)

Prereg. Math 0131.

The analysis of forces or loads acting upon a body or structure, and how the structure is enabled to resist these external forces. A study of statics and strength of materials of many of the common industrial structures such as beams riveted and welded joints, and thin walled pressure vessels. This includes the equilibrium of forces, tension, compression and shear stress, deformation, torsion, centroids and moments of inertia.

### EMng 0203 — Mechanics and Dynamics (2)

A study of stresses, vibrations, linkages, gears, and other machine elements found in complex electro-mechanical systems. Logical application of theory to the design and functioning of machine elements.

### EMng 0204 -- Control Devices (3)

Prereg. EMng 0122 or advisor approval.

Control devices respond to a variety of inputs. These may be created by temperature changes, pressure variations, rates of flow, potentials generated by light energy, moisture conditions, or any one of a number of physical conditions.

### EMng 0205 - Automatic Control Systems (4)

Prereq. EMng 0101, 0112, 0122, 0202, Math 0131, 0132, Physics 0201 or advisor approval.

Electro-mechanical systems are controlled by many different types of inputs and produce a vast variety of outputs. Commercial equipment response to pneumatic, hydraulic, and electrical or electronic inputs will be investigated. The purpose of the course is to consider the various basic control systems — on-off, proportional, proportional plus reset, and proportional plus reset plus rate.

### EMng 0206 — Hydraulics and Pneumatics (3)

A study is made of the function of various basic components of hydraulic and pneumatic sub-systems and methods of combining them to build various systems. The emphasis is on the use of hydraulic and pneumatics for power transmission and for control purposes.

### EMng 0207 — Electro-Mechanical Design (3)

Prereq. EMng 0101, 0122, 0201, 0211, 0203, 0204 or advisor approval. A course to exercise the student's knowledge of electro-mechanical technology. It provides the time and opportunity for students to work on the design, fabrication, assembly and testing of electro-mechanical devices or systems. The purpose is to promote independent study, initiative, and creativity by requiring the student to develop the design with minimal staff supervision.

### EMng 0208 — Electro-Mechanical Systems (3)

Prereq. EMng 0101, 0122, 0201, 0204, 0205, 0206, 0211, or advisor approvał.

Electro-mechanical systems are analyzed in detail to show how few are the principles involved in even extremely complex devices. This course embodies all of the principles which have been considered previously in the program. Thorough understanding of the applied principles is the aim of the course.

### EMng 0211 — Electronics Logic Circuits I (3)

Prereq. EMng 0121 or advisor approval.

An introduction to discrete, solid state electronic logic. Practical applications of passive and active waveshaping networks, solid state logic gates, binary pulse circuits, and computer arithmetic.

### EMng 0212 — Electronic Logic Circuits II (3)

Prereq. EMng 0211 or advisor approval.

Continuation of Logic Circuits I. Introduction to integrated circuit logic. Printed circuits, pulse circuits, counters, registers, decoders, and signal converters. Emphasis on integrated circuit applications.

# **EMERGENCY MEDICAL TECHNICIAN — PARAMEDIC**

### EMT-A 0101 — EMT Orientation (4)

Introduction to the roles and responsibilities of the EMT. This course includes relations to victims, other medical personnel, and other official persons. Labs will include field trips to operational emergency victim care suppliers.

# EMT-A 0102 — Emergency Medical Condition & Technique ! (6)

Instruction involves patient problems relating to life threatening and environmental emergency conditions and the application of principles and practice of techniques utilized to cope with same. Includes such problems as cardio-pulmonary, bleeding, shock, stroke, fractures, and exposure to hazardous and extreme environmental situations such as exposure to heat, cold, radiation, and electrical injuries. Will also include observation of vital signs and triage.

### EMT-A 0103 — Emergency Medical Condition & Technique II (5)

A continuation of EMT 0102. Concentration on common injuries, fainting, insect and animal bites, poisons, drug abuse, burns, diabetic reactions, mental disorders, and injuries to eyes, nose, ears, and gentiles.

### EMT-A 0104 — Extrication, Moving & Handling (3)

Instruction on the use of equipment and methods of removing victims from auto and other entrapments.

### EMT 0105 — Defensive Driving (2)

Instruction and experience in defensive driving habits.

### EMT-P 0101 — Equipment and Communications (3)

Instruction on the functions of heart monitoring devices, defibrillation devices, and the use of telemetrey systems.

### EMT-P 0102 — Care of Acute Medical Emergencies I (7)

Instruction in life support and/or intensive care techniques involving cardiac monitoring, defibrillation, airway or gastric intubation, relief of pneumothorax, and administration of apopropriate drugs and intravenous fluids. Lab includes in-hospital and ambulance experience.

# EMT-P 0103 — Care of Acute Medical Emergencies II (5)

Continuation of EMT-P 102 with greater emphasis on clinical experience in intensive care units, emergency room and ambulance.

### EMT-P 0104 — Pharmacology (2)

Instruction deals with the action and reactions of commonly used drugs and emphasizes those used in emergency situations.

### **ENGINEERING**

### Engr 0101 — First Aid & Safety (1)

The Standard and Personal Safety American Red Cross first aid course, involving CPR, bleeding control, poisoning treatment, proper methods of transportation, bandaging and splinting. The course involves lectures, practical work and group work. The standard certificate is granted if at least 20 hours of classwork is completed and all requirements are met.

#### Engr 0209 — Industrial Supervision (3)

Prereq. Second year course only or advisor approval.

Training in the methods of handling management problems, setting policies, personnel problems, etc. To equip the student for possible supervisory positions.

### **ENGINEERING DRAWING**

#### EnDr 0101 — Engineering Drawing I (3)

This is a basic course for students who have had little or no experience in engineering drawing. The principal objective is to acquire a basic understanding of the fundamental principles of engineering drawing through actual experience in both free-hand sketching and scaled machine drawings. Subject areas relating to this include orthographic, multiview drawings, geometric constructions, dimensioning practice, sectional views, and auxiliary views.

#### EnDr 0102 — Engineering Drawing II (3)

Prereq. EnDr 0101 or advisor approval.

The student is introduced to the techniques and principles employed in structural drawing, including structural-steel, timber construction, topographic work with emphasis on contour platting. The course is intended to train the student in the drafting methods used in civil engineering.

#### EnDr 0103 — Engineering Drawing III (3)

Prereq. EnDr 0101 and 0102 or advisor approval.

The purpose of this course is to enable the student to apply basic principles of engineering drawing, which were learned in prior courses, to solve practical problems encountered in civil engineering. Applied descriptive geometry is used to determine the relationship between points, lines, and surfaces in space. Study areas also include revolutions, vector geometry, and intersections of lines and surfaces.

#### **ENGLISH**

Students enrolled in programs leading to the Associate Degree in Applied Business or Applied Science may fulfill requirements for graduation by completing the following sequences of Freshmen English courses:

English 0111, English 0112, and English 0115.

Students with serious deficiencies in reading and composition are recommended to take Introduction to Study Skills. (No credit)

In some technologies, an additional requirement in Technical Writing and Speech may be required.

Students enrolled in programs leading to the Associate of Arts Degree must complete 11 quarter hours in Communications. Two courses will be selected from the following:

English 0111, English 0112, and English 0115

English 140A, 140B, 140C, and 140D.

Either Speech 0101 or Speech 0102 is also required.

#### Engl 0100 -- Learning Skills Orientation (4)

The course will employ the use of mnemonic and associative techniques to teach student various types of information.

#### Engl 0111 — Contemporary Writing Skills I (4)

This course reviews (1) syntax, grammar, and punctuation, (2) studies techniques of good writing style, and (3) introduces the student to coherent writing. The student becomes aware of different demands of purpose, topic, and audience when writing a paper. 4 lec. 1 lab.

#### Engl 0112 — Contemporary Writing Skills II (4)

This course continues the emphasis on basic skills for writing clearly and effectively. This course assists the student in understanding the rhetorical devices which contribute to good writing. Fundamentals of writing research papers are included. 4 lec. 1 lab.

#### Engl 0115 — Composition and Mass Communication (4)

This course covers the nature and function of all forms of mass communication — newspapers, television, radio, film, and the related topics of advertising and public relations. Basically, the student is instructed how to become a more aware consumer of media. The writing assignments are structured to help the student critically judge various media. 4 lec. 1 lab.

#### Engl 0121 — Technical Writing (3)

Prereg. 8 hrs. of English.

Technical Writing stresses clarity in technical communications, with particular emphasis upon the improvement of writing style and the conveying of ideas accurately and concisely. The major divisions examined are reports (formal and informal), proposals, resumes, and specifications.

#### Engl 0122 — Technical Writing (4)

Technical Writing (Retail) emphasizes the written and spoken communications in the business field. Business communication skills are stressed, including business letters and business forms.

#### Engl 0140 — Topics in English Language and Literature

Fr. and Soph. Each course focuses on literature, mostly literature of the 20th century considering humanistic problems, themes or issues important today. Each course includes several literary genres (novels, short stories, poems, plays, and essays). The aims are to improve the students' abilities in appreciative and analytical reading, clear thinking, discussion, careful persuasive and imaginative writing. 4 lec. 1 lab.

140-A Literature of Initiation and Experience	4 hrs.
140-B Masculine and Feminine Images in Literature	4 hrs.
140-C Literature of Imagination	4 hrs.
140-D Literature of Black Authors	4 hrs.

#### Engl 0201 — Introduction to Fiction (4)

Prereg. 4 hrs. above 100.

This course provides a study of the forms and techniques of the novel, novella, and the short story.

#### Engl 0202 - Introduction to Poetry (4)

Prereg. 4 hrs. above 100.

There is intensive reading of selected poems from all periods of English and American literature and study of forms and techniques.

#### Engl 0203 — Introduction to Drama (4)

Prereg. 4 hrs. above 100.

Modern dramatic forms are analyzed. Selections include translations of world masterpieces as well as English and American drama.

#### Engi 0204 — Comparative Literature I (4)

Prereg. 4 hrs. above 100.

Selected classical texts as well as modern writings in the classical style are used. The purpose is to recognize and define classical sensibility in western literature.

#### Engl 0205 — Comparative Literature II (4)

Prereg. 4 hrs. above 199.

This course deals with the aesthetic and philosophical concepts that distinguish the Romantic tradition in western literature. Primarily the works of German, English, and French authors are studied.

#### Engl 0206 — Comparative Literature III (4)

Prereq. 4 hrs. above 199.

Selected literary works are used which provide background for and examples of modern writing in today's world.

#### Engl 0225 — Introduction to American Literature (4)

Prereq. 8 hrs. above 100.

Themes and ideas in 19th and 20th centuries of American literature are studied.

#### Engl 0226 — Introduction to English Literature (4)

Prereq. 8 hrs. above 100.

Themes and ideas in 19th and 20th centuries of English literature are studied.

#### Engl 0290 — Topics in English (2/3)

Study of various topics in English otherwise not available to students.

### **EXECUTIVE SECRETARIAL**

#### ExST 0101 — Typing I (3)

Typing I is a study of the touch system of typewriting with emphasis on development of speed and accuracy and the production of simple problems such as: personal notes, letters, outlines, and short tabulated reports. A proficiency test is given to all students who have had previous training in typing to determine if their level of competency is sufficient to test out of Typing I.

#### ExST 0102 — Typing II (3)

Prereq. Typing I.

Typing II is a continuation of Typing I with students applying basic typing techniques to increasingly more difficult problems.

#### ExST 0103 — Typing III (3)

Prereq. Typing I & II.

Typing III is a continuation of Typing II with emphasis on developing the student's ability to produce mailable copy of technical reports, drafts, business correspondence, etc.

#### ExST 0111 — Shorthand I (3)

The student is taught to read and write Gregg shorthand and develop the nonshorthand elements of transcription which include vocabulary development, spelling, punctuation, and grammar. A proficiency test is given to all students who have had previous training in shorthand to determine if their level of competency is sufficient to test out of Shorthand I.

#### ExST 0112 - Shorthand II (3)

Prereg. Shorthand I.

A continuation of Shorthand I designed to perfect shorthand theory, phonetics, word families, brief forms and phrases, and penmanship. Students are encouraged to raise speed and accuracy levels.

#### ExST 0113 -- Shorthand III (3)

Prereg. Shorthand | & II.

A continuation of Shorthand II with greater emphasis on building speed and accuracy.

#### ExST 0120 — Business Machines ! (3)

A study of various types of modern office machines, including addinglisting machines, electronic and mechanical calculators.

#### ExST 0121 — Business Machines II (for Secretarial Majors only) (3)

Prereq. Typing I & II.

A study of office duplicators and copiers, executive typewriters, and the composer.

#### ExST 0214 — Shorthand IV (3)

Prereg. Shorthand I. II. III.

A systematic development of business vocabulary to prepare the student to work at high speeds in shorthand. The use of shortcuts and high frequency brief forms and derivatives will be emphasized.

#### ExST 0215 — Advanced Shorthand Speedbuilding (1)

Prereq. Shorthand I. II. III. IV.

A continuing development of high speed in specialized areas through the use of shortcuts and high frequency brief forms and derivatives. Students will be given a wide variety of dictation with emphasis on individual speed development.

#### ExST 0216 - Expert Shorthand

Prereq. Shorthand I, II, III, IV, Adv. Shorthand Speedbuilding. Develop the student's ability to construct fluent outlines through the use of special shortcuts, prefixes, suffixes, and by combining forms of high frequency.

#### ExST 0221 — Dictation and Transcription I (3)

Prereg, Typing I, II and Shorthand I, II.

A supplemental course to Shorthand III emphasizing practice in taking dictation and transcribing at various rates of speed for mailable copy. Office style dictation procedures will be emphasized.

#### ExST 0222 — Dictation and Transcription II (3)

Prereg. Dictation and Transcription I.

A supplemental course to Shorthand IV emphasizing practice in taking dictation and transcribing at various rates of speed for mailable copy. Machine transcription will be emphasized.

#### ExST 0223 — Expert Transcription

Prereg. Dictation and Transcription I, II.

Develops the student's ability to produce mailable copy with high speed and accuracy.

#### ExST 0231 — Records Management (3)

A comprehensive course dealing with the creation, distribution, retention, utilization, storage, retrieval, protection, preservation, and final disposition of all types of records within an organization.

#### ExST 0241 — Secretarial Practices I (3)

Prereq. Typing I, II, III, Shorthand I, II, III, Records Management, Business Machines I, II, Dictation and Transcription I.

A course designed to emphasize the responsibilities and opportunities of a secretarial position, as well as the personal qualities necessary for secretarial success. Opportunity is provided for the students to use "word processing" skills, transmittal services, and records management in realistic office situations.

#### ExST 0242 — Secretarial Practices II (3)

Prereq. Secretarial Practices I.

The class encompasses a variety of secretarial duties such as assistance with travel arrangements, planning meetings, the presentation of business data, and handling financial and legal responsibilities. The variety of job opportunities open to the college-trained secretary and the essentials for achieving professional status are discussed. Each of these topics is placed in a realistic office simulation so the student may learn by doing.

#### \*ExST 0243 — Secretarial Practices III (5)

Prereq. All classes in major that are required for graduation.

Secretarial Practices III will be completed in the classroom where students will assume a variety of office jobs in a fictitious company and thereby develop and apply a wide range of clerical skills.

#### \*ExST 0244 — Secretarial Practices IV (7)

Prereg. All classes in major that are required for graduation.

This class will be completed as actual work experience in a local business, industrial, or professional office.

\*The student may take either ExST 0243 or ExST 0244, but his choice must be approved by his advisor.

#### **FRENCH**

#### Fren 0111 -- Elementary French (4)

Beginning course of a 3-qtr. 1st-year sequence. Basic grammatical concepts and patterns. Emphasis on development of reading, listening, comprehension, speaking and writing skills. Basic text and workbook used. Lab required.

#### Fren 0112 — Elementary French (4)

Prereg. 111.

Continuation of 111. Basic text, workbook and readings used. Lab required.

#### Fren 0113 - Elementary French (4)

Prereg. 112.

Continuation of 112. Basic text, workbook and readings used. Lab required.

#### Fren 0211 — Intermediate French I (4)

Prereq. 113.

Includes an intensive review of grammar and sentence structure, and introduces the student to selected readings in French literature. Oral facility is stressed. 3 lec. 2 labs.

#### Fren 0212 - Intermediate French II (4)

Prereg. 113 or instructor's approval.

Continued intensive review of grammar is given. Sight translation is stressed. Conversational drills include advanced idiomatic expressions. 3 lec. 2 labs.

#### Fren 0213 — Intermediate French III (4)

Prereg. 212 or instructor's approval.

Advanced vocabulary and sentence structure are stressed. Emphasis is on writing and free composition. 3 lec. 2 labs.

#### **GEOGRAPHY**

#### Geog 0101 — Physical Geography (5)

Systematic survey of earth-sun relationships, land forms, climate, soils and natural vegetation. 4 lec. 2 labs.

#### Geog 0121 — Cultural Geography (4)

Systematic survey of settlement, population, and economic activities that are significant to man.

#### Geog 0125 — World Geography (4)

Systematic regional survey of world geographical conditions. Emphasis on physical, cultural, and economic activities.

#### Geog 0130 — Economic Geography (4)

Systematic survey of locational economic patterns and their interrelationships.

#### Geog 0201 — Environment and Man (4)

Geographic survey of environmental changes caused by man's activities. Focus on pollution of air and water and destruction of plant and animal communities.

#### Geog 0230 — Urban Geography (4)

Study of city function, patterns, past and current problems confronting the city including planning, zoning, housing, and urban renewal.

#### Geog 0240 - Geography of Eastern United States (3)

Systematic and regional survey of eastern United States. Emphasis on cultural and economic development.

#### Geog 0241 — Geography of Western United States (3)

Systematic and regional survey of western United States. Emphasis on cultural and economic development.

#### Geog 0242 — Geography of Ohio (3)

Detailed regional study of physical background, settlement and economic development.

#### **GEOLOGY**

#### Geoi 0101 - Physical I (4)

A study of the Earth's basic materials and their formation, Volcanism, Metamorphism, and sedimentation, with the rocks evolving from each of these processes and the natural resource minerals associated with each process. 3 lec. 3 labs.

#### Geol 0102 - Physical II (4)

Continuation of 101 as a study of the process effecting each of the above including crystallization, mapping, weathering, erosion, transportation of materials, glaciation, and mountain building. 3 lec. 2 labs.

#### Geol 0103 — Historical I (4)

Basic study of the Earth's history of formation, Paleo studies of plants, animals and landforms associated with each Geologic age. 3 lec. 2 labs.

### Geol 0201 — Common Rocks, Minerals, and Fossils (3)

Identification of rocks, minerals and fossils can only be encountered on field trips, vacations, and in the immediate area of Scioto County. Not open to students with credit in 101 or 102, 3 lec.

#### **GOVERNMENT**

### Govt 0100 — Introduction to the American Political System (4)

An introductory course in the basic fundamentals of the American political system, national, state, and local levels, with emphasis on structures, functions, political parties and the election process. Not recommended for students who have recently completed a senior h.s. course in civics or American Government.

#### Govt 0101 — National Government (4)

Constitutional basis and development; political processes, structures, and functions of the national government.

#### Govt 0102 — National Policy Issues (4)

Study of the administration and policy-making processes of the American national government in selected areas, i.e., foreign policy, welfare, environment, etc.

#### Govt 0201 - Urban Politics (5)

Prereq. 101 or permission.

Impact of urbanization on structure and functions of municipalities; emphasis on utilization of the political processes to resolve community conflict.

### Govt 0203 — Politics in the American States (5)

Prereq. 101 or permission.

Comparative analysis of state political systems; emphasis on structure and process of policy making of the states within the federal context.

### Govt 0204 — introduction to World Politics (4)

Political relations among states; methods and goals of diplomacy; sources of international tensions and conflicts; international organizations and conflict resolution.

### Govt 0205 — Politics of Appalachia (4)

Prereq. 101 or permission.

Analysis of political processes in Appalachia; emphasis on the relationship between politics and economic development of the region. Major policies considered: mining and its regulation; War on Poverty in Appalachia; politics of taxation in the region.

# Govt 0230 — Governments of North America (4)

A comparative study of the governments of the U.S., Canada, and Mexico.

### Govt 0231 — Comparative Government (4)

Government and politics of Communist party states, with emphasis in the Soviet Union.

### Govt 0290 — Pro Seminar in Practical Politics (4)

Prereq. Permission only.

Structure and operations of American political organizations; techniques of political campaigning.

### Govt 0299 — Current Political Topics (3/4)

Prereq. 12-15 hrs. govt. or permission.

Special topics in selected policy areas, to be announced.

# HEALTH, PHYSICAL EDUCATION, AND RECREATION

### HPER 0110 — Physical Education Activities (1)

Basic rules and fundamentals for each activity are stressed. Special emphasis on strategies, team, and individual play. An appreciation of each of the activities is developed to carry over into later life.

110-A Archery

110-B Badminton

110-C Basketball

110-D Bowling

110-E Conditioning & Weight Training

110-F Beginning Golf

110-G Intermediate Golf

110-H Judo

110-I Karate

110-J Beginning Swimming

110-K Intermediate Swimming

110-L Live Saving & Water Safety

110-M Beginning Tennis

110-N Intermediate Tennis

110-O Volleyball

110-Q Cycling

110-R Modern Dance

110-S Softball

110-T Fencing

110-U La Crosse

110-V Field Hockey

110-W Handball

### HPER 0202 — Personal and Community Health (4)

Fundamentals, practices and appreciation of healthful living. Designed to incorporate the principles of scientific health information and promote desirable attitudes and practices for individuals, parents, and teachers.

#### HPER 0204 — Drugs, Alcohol, and Tobacco (3)

In-depth study of contemporary issues — drugs, alcohol, and tobacco. The nature of the action and motivational forces that influence their use and procedures to provide effective education in the school and the home.

#### HPER 0227 — First Aid (3)

The Standard and Personal Safety American Red Cross first aid course, involving CPR, bleeding control, poisoning treatment, proper methods of transportation, bandaging and splinting. The course involves lectures, practical work and group work. The standard certificate is granted if at least 20 hours of classwork are completed and all requirements are met.

#### HPER 0234 — Laboratory Experience in Physical Education (2)

Prereg. P.E. Majors.

Observation and research in physical education at the elementary and secondary levels.

#### HPER 0239 — Athletic Officiating - Football (3) (Fall Qtr. Only)

Rules, mechanics, and procedures in officiating. Practice under actual game conditions. State certification upon successful completion of state examination. OHSAA fee for certification and books.

#### HPER 0240 -- Athletic Officiating - Basketball (3) (Wtr. Qtr. Only)

Rules, mechanics, and procedures in officiating. Practice under actual game conditions. State certification upon successful completion of state examination. OHSAA fee for certification and books.

#### HPER 0241 — Athletic Officiating - Baseball (3) (Sp. Qtr. Only)

Rules, mechanics, and procedures in officiating. Practice under actual game conditions. State certification upon successful completion of state examination. OHSAA fee for certification and books.

### HPER 0242 - Athletic Officiating - Track (3) (Sp. Qtr. Only)

Rules, mechanics, and procedures in officiating. Practice under actual meet conditions. State certification upon successful completion of state examination. OHSAA fee for certification and books.

#### HPER 0250 — Recreation Leadership (3)

Lectures, discussion and group dynamics in social recreation. Dynamics involved include games, sports skills, dance, arts and crafts, nature studies, setting up various types of tournaments and practical work in community organizations.

### HPER 0261 — Introduction to Physical Education and Health (2)

Prereg. P.E. Majors/Minors.

Lectures, discussion, and visual aids pertaining to scope and content of a professional physical educator.

#### HPER 0270 — Physical Education for the Elementary Classroom (3)

Lab and lecture experiences for teaching physical education in the elementary schools. Lab experience revolves around methods of presenting movement education in the primary grades and the use of games, self-testing activities, rhythmics and innovative devices in helping to meet general and specific objectives in the intermediate grades. Designed for elementary education majors.

#### HPER 0275 — Community Health Programs (4)

Institutional frameworks for promoting and maintaining health of the people in community, state and nation.

#### HPER 0280 — Safety Education (4)

Preparation for assuming responsibility for programs of safety education and accident prevention in schools, industry and public services.

#### HPER 0281 — Administration of Intramural Athletics (4)

Prereq. Ed. & P.E. Majors/Minors.

Organizing and administering a program of intramural sports of all age levels. Designed especially for elementary and secondary teachers.

#### HPER 0290 — The Art of Sport Officiating (2)

Prereg. P.E. Majors.

Provides a meaningful, educational experience of a practical nature in the area of sport officiating.

#### HPER 0295 — Independent Study (2)

Prereq. P.E. Majors.

Study, observation and research in selected physical education fields. Under the direction of HPER faculty member.

### **HISTORY**

#### Hist 0101 — Western Civilization in Modern Times: Renalssance to 1648 (4)

Renaissance; Reformation; origins of national state system; diplomacy and imperialism as applied to Portugal, Spain, and Hapsburg Empires; commercial and scientific revolutions.

#### Hist 0102 - Western Civilization in Modern Times: 1648-1848 (4)

Absolutism, constitutionalism, operation of coalition diplomacy and imperialism as applied to France and Britain; westernization of eastern Europe; enlightenment; French Revolution; agricultural, commercial and industrial revolutions; growth of the ideologies of liberalism, socialism and nationalism.

# Hist 0103 — Western Civilization in Modern Times: 1848 to the Present (4)

Spread of liberalism, socialism and nationalism; rise and fall of Germany bid for power in 2 world wars; new ideologies of Social Darwinism and totalitarianism; Russian and Chinese revolutions and international communism; rise and fall of western empires in Africa and Asia.

### Hist 0111 — American History to 1828 (4)

Exploration and colonization; political, social and economic life of the English colonies to 1763; struggle for independence; constitutional development and the Federalist era; Jeffersonian democracy and the War of 1812; rise of Jackson.

### Hist 0112 — American History, 1828-1900 (4)

Jacksonian democracy; territorial expansion; growth of sectionalism; Civil War; reconstruction; impact of expanded Industrial Revolution.

### Hist 0113 — American History Since 1900 (4)

Progressive movement, WW I; Republican prosperity; the Great Depression and the New Deal; WW II and problems of the cold war era; turmoil and reform in the 1960's.

### Hist 0121 — Origins of Western Civilization (4)

Birth of civilization in Near East; culture of Greece and Rome; establishment of Christianity; formation of medieval European states. Emphasis upon cultural contributions of these earlier societies to modern western civilization.

#### Hist 0201 — America in Transition: 1763-1801 (3)

Political, social and diplomatic aspects of the American Revolution; Articles of Confederation; creation of a new nation in the administrations of Washington and Adams.

### Hist 0220 — History of American Foreign Policy (3)

Overview of American Foreign relations since 1776: the revolution; neutral rights and Napoleonic Wars; isolation and territorial expansion; Far Eastern Policy; Caribbean imperialism; WW I; Republican isolationism; New Deal neutrality; WW II; rise and "fall" of the cold war.

### Hist 0290 — Topics in American History (3)

This course will provide students and instructors the opportunity to explore topics of special interest to them. Requirements may include research papers, historiographical essays, media projects, etc.

### HUMANITIES

### Humn 0101 — Tradition of Great Books (3)

Prereq. Fr. or Soph.

Classics of ancient Greek, Roman and Hebrew are studied to give an understanding of western European cultural heritage. There is discussion, practice in critical thinking and in reading and writing about these great works.

### Humn 0102 — Tradition of Great Books (3)

Prereq. Fr. or Soph.

Classics studied are from the ancient world, the middle ages, the age of reason, and the Romantic period. See 101 for further description.

### Humn 0103 — Tradition of Great Books (3)

Prereq. Fr. or Soph.

Classics of the ancient world, the middle ages and writings of more recent times including the present are studied. See 101 for further details.

### **JOURNALISM**

### Jour 0105 — Introduction to Mass Communication (4)

All the forms of mass communication including newspapers, magazines, radio-television, book publishing, public relations, advertising and photojournalism. Begins with an analysis of communication process and ends with media career opportunities.

### Jour 0231 — News Reporting (4)

Prereq. Typing proficiency, passage of English proficiency test.

Methods of gathering and evaluating news and writing typical news stories. Practice work covering assignments and preparing copy.

### Jour 0250 — Advertising Principles (5)

Prereq. Advertising and PR majors or permission. Major factors in development of advertising programs.

### LINGUISTICS

### Ling 0270 — The Nature of Language (5)

Nontechnical investigation into basic nature of human language.

### **MATHEMATICS**

### Three Track System in Mathematics for Engineering Technology Students

The math sequence for engineering technology students who haven't had high school algebra or with a low ACT score in mathematics should take Math 091 to give him background for the required sequence of Math 0130, 0131, and 0132. A student with high school algebra and geometry and an average ACT score in mathematics should take Math 0130, 0131, and 0132. A student with three or four years of high school mathematics and an ACT score above the 75th percentile of the national norm may have prerequisites for Math 0130, 0131, 0132, or 0201 waived, with the approval of the math department, and start at the level appropriate for him.

#### Math 0100 — Math Appreciation (4)

A course for students who do not need mathematics as a tool. Its purpose is to foster an appreciation of mathematics through involvement in areas of mathematics not ordinarily covered in more rigorous courses. Brain teasers, probability, topology, mathematics in art and history are possible topics, but topics may vary with the instructor. \*Check transferability of credit.

### Math 0101 — Basic Algebra (4)

Fundamentals of basic algebra. A study of the properties of integers, polynomials, factoring, rational expressions, exponents, radicals, functions and graphs. Solving first degree equations in an unknown, with applications.

### Math 0105 — Business Math I (4)

Proficiency in the fundamental skills of mathematics as applied to business. Payroll procedures, business and financial reports, presentation of business data and computing of interest for money and banking.

### Math 0106 — Business Statistics (4)

Basic techniques relating to organization of business and economic data and derivation of calculations therefrom. Analysis and interpretation of the results of statistical summaries, comparisons, etc. Uses of averages, relatives and dispersion; tests relating to significance, probability, sampling, and quality control applications of statistics.

### Math 0108 — Allied Health Math I (4)

Exponents and logarithms; use of the slide rule; basic algebra; linear equations in one unknown; graphing linear equations; right triangle trigonometry.

# Math 0109 — Allied Health Math II (4)

Prereq. Allied Health Math I.

Ratios and proportions; progressions; quadratic equations; graphing quadratic functions; use of programmable calculator; basic statistical concepts.

### Math 0111 - Data Math! (4)

Systems of numerations; concepts of logic; basic algebra; solving equations and inequalities; business applications; introduction to programming (desk calculator).

### Math 0112 - Data Math !! (4)

Prereq. Data Math I.

Basic algebra; solving simultaneous equations by graphing; approximation; floating point arithmetic; iteration; matrices; boolean algebra.

### Math 0113 - Data Math III (4)

Prereq. Data Math II.

Sequences: arithmetic and geometric progressions; basic fortran programming.

## Math 0120 — Elementary Topics in Math I (5)

Prereq. 2 yrs. h.s. math.

Sets; concepts of logic; mathematical systems; systems of numeration; basic ideas about integers, rational numbers and real numbers.

### Math 0121 — Elementary Topics in Math II (5)

Prereq. 2 yrs. h.s. math.

Basic algebraic work with equations and inequalities in one and two unknowns; nonmetric and metric geometry; coordinate geometry; introduction to statistics and probability.

### Math 0130 — College Algebra I (4)

Prereq. Mastery of at least 1 year of h.s. algebra or Basic Algebra Integers; Powers of Ten; Scientific Notation; Review of Algebraic Expressions and Operations; Dimensional Analysis; Linear Equations in one and two variables, including graphing; Exponents and Radicals; Right Triangle Trigonometry; Law of Sines and Law of Cosines Applications; Basic Properties of Vectors.

### Math 0131 — College Algebra II (4)

Prereq. Mastery of Algebra I or equivalent

Quadratic Equations, one unknown; Graphing Quadratic Equations, Identification and Approximation of Roots; Exponentials and Logarithms; Binomial Expressions and Progressions; The j-operator Vectors; Review Oblique Triangle Solutions.

#### Math 0132 — Trigonometry and Analytic Geometry (4)

Prereq. Mastery of Algebra II or h.s. equivalent.

Solving inequalities, linear and quadratic; Graphing Trigonometric Functions; Polar Coordinates; Trigonometric Identities; Trigonometric Equations; A study of the basic properties of the conic sections.

#### Math 0150 — Elementary Statistics for the Social and Behavioral Sciences (4)

Prereq. 3 yrs. of h.s. math or Algebra I and either Govt. 101, Psy. 101, or Soc. 101. (Not for mathematic majors). Treatment and presentation of quantitative social and behavioral data: measures of central tendency; data distribution; association and correlation; sampling; estimations; and simple tests of significance.

#### Math 0201 - Calculus I (5)

Prerequisites: 4 years of high school math (including trigonometry), or Math 130, Math 131 and Math 132.

Functions and graphs; simple sequences; limits; differentiation and integration of algebraic functions; mean-value theorem; maxima and minima.

#### Math 0202 - Calculus II (5)

Prereq: Calculus I

Differentiation and integration of logarithmic, exponential, trigonometric and hyperbolic functions; techniques of integration; applications of the definite integral; L'Hospital's rule; improper integrals.

#### Math 0203 — Calculus III (5)

Prereg: Calculus II

Sequences and series; Taylor series; vectors; vector calculus; functions of several variables; partial derivatives; gradients; multiple integrals.

### **MEDICAL LABORATORY**

#### MLTc 0102 — Medical Microbiology (4)

Prereq. Microbiology Biol 235

Students are expected to interpret and identify the majority of the organisms and procedures performed in this section. Emphasis of the course will include interpretation and knowledge which will enable the student to become proficient at standard techniques in pathogen identification. Emphasis will be placed upon specialized methods such as concentration of mycobacteria, blood cultures, antibiotic, sensitivity tests and anaerobic techniques. Protozoological helminthological, as well as the mycological studies, will be stressed.

#### MLTc 0111 — Medical Technology Orientation (2)

To introduce the student to the hospital, Laboratory and various Laboratory personnel. Medical terminology associated with the Medical Laboratory field. Theory and technique in skills such as the use of basic instruments, centrifuges, balances, pipets. Preparation of solutions, Laboratory safety and bookkeeping will be emphasized.

#### MLTc 0120 - Hematology I (4)

Student gains the basic techniques of the common routine hematological evaluations. The origin and formation of blood cells, including demonstrations of formed elements of blood in their normal and abnormal stages are studied. Differential morphology staining qualities, recognition are stressed. Techniques of red, white, and platelet counts are discussed and practiced. Different methods of hemoglobin determinations are reviewed and applied.

#### MLTc 0121 — Hematology II (4)

Prereg. Hematology I.

The primary purpose is the qualitative and quantitative evaluation of the cellular elements of the blood in addition to coagulation studies. This includes the study and practice of such procedures as prothrombine time, partial thromoplastin time, bleeding and coagulation time. Serum prothrombine consumption is discussed. Diseases including anemias, leukemias, and hemoglobinopathy will be presented.

#### MLTc 0201 — Urinalysis (3)

Chemical and microscopic examination of urine. Qualitative and quantitative Laboratory procedures for urine. The theory and application of the kidney tests.

#### MLTc 0202 — Immuno-Serology (4)

Prereg. Microbiology Biol 235

Medical laboratory technician student has a limited knowledge of immunology and serology. This section is designed to introduce the student to basic fundamentals of antigen-antibody reactions, and then allow the student to apply these fundamentals in the serological procedures performed in the clinical laboratory. The student must become familiar with, and proficient in, a variety of procedures including syphilis serology, latex procedures, pregnancy tests, and other clinical immunological procedures.

#### MLTc 0203 - Blood Banking (4)

Basic theory including the Mendelian Laws, genotypes and phenotypes is discussed. Collection and processing of blood is stressed. Instruction and practice in typing and cross-matching are given. Tritation procedures, discussion of a typical antibody and similar techniques are related to the recognition of incompatibilities. This part of the program will be spent in the teaching laboratory in order for the student to develop accurate techniques outside of a clinical setting to gain speed and proficiency.

#### MLTc 0204 — Medical Laboratory Internship (13)

Two quarters of internship providing a practical application of the skills and abilities learned during the previous six quarters of the curriculum. The students are assigned to an accredited hospital laboratory as a trainee.

#### MLTc 0205 — Special Problems in Medical Laboratory (2)

During the internship period, the student will keep a monthly log indicating scope and degree of activity in the laboratory. A copy of this work will be filed with the hospital and a copy with the college. A problem of special interest to the student, requiring library and/or laboratory study will be selected by the student and the faculty coordinator.

#### MLTc 0211 — Clinical Chemistry I (4)

In fundamental laboratory methods the student develops a theoretical and practical knowledge of basic skills applicable to clinical chemistry. During this section the student learns to apply these skills, and at the same time learns certain variations of these skills and knowledge for particular procedures in the clinical chemistry laboratory. The student participates in the preparation of solutions and reagents used in biological examinations. Colorimetry, photometry, gasometry, enzyme chemistry, flame photometry, and other clinical chemistry laboratory procedures are studied.

#### MLTc 0212 — Clinical Chemistry II (4)

Prereg. Clinical Chemistry I.

Continued study of the medical applications of the topics presented in Clinical Chemistry I. The study of diagnostic isotopology, steroid determinations, and fluorometry will be introduced.

#### MLTc 0213 -- Parasitology (2)

An introductory review of Medical Parasitology. Parasitism in Man. Host-parasite relationship. Transmission methods of control, diagnosis, and physiological aspects. 2 hours lecture and Laboratory combined. Laboratory work limited to study of prepared microscope slides, films, and 35 mm Kodachrome slides.

#### MLTc 0214 - Mycology (2)

An introductory review of the fungi of Medical interest and their diseases. Transmission, prevention and diagnosis. 2 hours lecture and Laboratory combined. Laboratory work limited to observation of Laboratory cultures, films and 35 mm Kodachrome slides.

#### MLTc 0220 — Medical Technology Seminar (1)

Student participation in areas such as ethics and responsibilities in the medical laboratory. Career and professional opportunities in the medical laboratory. Consideration of other allied health occupations, the value of research to laboratory sciences and management problems for the bench-side worker.

#### MUSIC

#### Musi 0120 — Introduction to Music Literature (2)

Development of listening skills for understanding elements of musical style in historical perspective and significance of music as a fine art.

#### Musi 0121 — Introduction to Baroque Music (2)

Prereg. 120 or permission.

Study of selected works from Baroque style period through readings, scores, tapes and recordings.

# Musi 0122 — Introduction to Music of the Classical and Romantic Periods (2)

Prereg. 120 or permission.

Study of selected works from the Classical and Romantic style periods through readings, tapes and recordings.

#### Musi 0123 — Introduction to 20th Century Music (2)

Prereg. 120 or permission.

Study of selected works of 20th Century, both traditional and electronic, through readings, scores, tapes, and recordings.

#### Musi 0160 — Fundamentals of Music (3)

Principles of notation, meter, major and minor scales, rhythmic and melodic reading, singing, and keyboard.

#### Musi 0161 — Music for the Classroom Teacher (3)

Prereg. Music Fund, with minimum grade of C.

Methods of teaching elementary music, with emphasis on singing, playing instruments, and rhythmic body movement.

#### Musi 170 A,B,C — Class Voice (3 gtrs., 1 cr. hr. per at.)

Prereq. non-voice majors — Music Reading (must be taken in sequence or by permission).

Basic techniques of voice production; breathing, diction, projection, tone-color, and interpretation.

### Musi 0175 — Men's Glee Club (1)

Prereq. Permission (audition) (3 lab hrs.)

### Musi 0176 — Women's Glee Club (1)

Prereq. Permission (audition) (3 lab hrs.)

#### Musi 0180 — College Chorus (2)

Prereq. Permission (audition) (4 lab hrs.)

### Musi 0181 — College Band (2)

Prereq. Permission (audition) (4 lab hrs.)

### Musi 0221 — History and Literature of Music (3)

Prereg. 0123.

History of music with survey of musical literature to 1750. Emphasis on elements of Renaissance and Baroque styles.

### Musi 0222 — History and Literature of Music (3)

Prereg. 0221.

Survey of musical literature from 1750 to 1900. Emphasis on elements of Classic and Romantic styles.

# Musi 0223 — History and Literature of Music (3)

Prereg. 0222.

Survey of musical literature written since 1890. Emphasis on elements of impressionism, post-Romanticism, and Contemporary idiom.

### Musi 0230 — Music - Theater (3)

Participation in selected musical theater projects. Participation may be through production or performance.

### Musi 0290 — Topics in Music (2/3)

Study of various music topics otherwise not available to students: music and the emotions, folk and country music, rock forum, etc.

# NURSING — ASSOCIATE DEGREE

### ADNr 0101 - Nursing I (8)

Nursing I is the foundation of all subsequent nursing courses. In order for the student to begin to understand man and his interaction with his environment, this beginning course will present therapeutic communication with individuals and provision for a therapeutic environment through personal hygiene, comfort, safety, rest, exercise, nutrition and elimination. In addition, a survey of the history of nursing and concerns of the nursing professional will be explored.

#### ADNr 0102 - Nursing II (7)

Nursing II is a continuation of Nursing I with attention to more difficult skills involved in the administration of medications, surgical asepsis, nursing assessment, the pre- and post-operative care of patients, and the understanding of the nurse's role in care of the dying patient. The principles of nursing learned in the beginning quarter will be enlarged on and developed in greater depth. In addition, Nursing II will provide learning experiences in assessing, developing care plans and caring for people with problems associated with the endocrine and musculoskeletal systems.

### ADNr 0103 - Nursing III (7)

Provides learning experiences in assessing needs of people with cardiovascular and respiratory problems and those needing surgical intervention to correct problems. Following this assessment, students learn to develop individual care plans and to provide the care needed.

### ADNr 0201 - Nursing IV (7)

Provides learning experiences in assessing, developing care plans, and caring for people with problems associated with the genito-urinary and gastro-intestinal systems.

### ADNr 0202 - Nursing V (7)

Emphasizes the promotion of mental health and the prevention of mental illness with individuals and families through the use of developmental task concepts and community resources. Learning experiences include the care of the mentally ill.

### ADNr 0203 - Nursing VI (7)

Content of this course is presented as nursing care based on needs of persons having many of the varied health conditions requiring medical and/or surgical intervention. Modification of care are discussed according to the age and individual needs of patients. Actual patients from the clinical situation may be observed and/or cared for to integrate the classroom content with the clinical situation.

Nursing care of patients with burns, accidental injuries, endocrine and neurological conditions are emphasized.

Modifications of normal nutrition diagnostic measures, and therapy pertinent to these conditions are studied.

### ADNr 0204 - Nursing VII (7)

The overall view of complete maternity care envisions an inclusive process which begins with supervision, care, and assistance from the inception of pregnancy until the end of lactation or approximately one year after the birth of the baby. This view recognizes the tremendous importance of health mental attitudes toward parenthood and family life, the necessity of giving parents more facts about the emotional and social development of children, and understands the vital role of supportive family relationships and constructive childrearing practices.

It emphasizes the preventive aspects of complete maternity care which is community based and correlates a multi-disciplinary approach to more adequately meet the total health needs of mother, child and family.

### ADNr 0205 - Nursing VIII (14)

Provides learning experiences in team leadership and in the care of people with problems associated with eyes, ears, nose, throat, skin, and blood.

Provides an opportunity for advanced learnings in utilizing the problemsolving technique in an area of the student's individual interest. Each student selects a study area in nursing with the guidance of a faculty advisor.

# **NURSING — PRACTICAL**

# LPNr 0101 — Body Structure and Function (4)

This course provides basic study of the structural organization and function of the body. Emphasis is on the interrelation of the systems. Anatomical charts and models are used.

#### LPNr 0110 - Nutrition (2)

Included are the sources and contributions of the various nutrients, the importance of nutrition in health, and the effects of cooking on the nutrients. Diet therapy is introduced by way of modifying a normal diet to meet specific dietary needs.

# LPNr 0111 — Practical Nursing I (10)

The course is concerned with the basic nursing principles and skills necessary for efficient patient care. Emphasis is on those needs common to man and on the maintenance of body functions.

### LPNr 0112 — Practical Nursing II (6)

Prereg. LPNr 0111.

This course is a continuation of Practical Nursing I with additional units included to provide the complete basic fundamentals of skilled practical nursing. Observing, reporting and charting signs and symptoms are included. Nursing care of specific medical-surgical conditions is provided by clinical experience in Mercy Hospital.

#### LPNr 0113 — Practical Nursing III (8)

Prereg. LPNr 0112.

Medical-surgical nursing is the focus. Emphasis is on learning experiences in assessing, developing care plans and care studies, and caring for short-term and long-term patient situations involving cardiovascular, gynecological, genito-urinary, digestive, and skin and allergy conditions. Related, supervised clinical experience is provided in Mercy Hospital and includes giving medications.

### LPNr 0114 - Practical Nursing IV (8)

Prereq. LPNr 0113.

This course is a continuation of Practical Nursing III with emphasis on learning experiences in assessing, developing care plans and care studies, and caring for patient situations relating to conditions of the neurological system, eye and ear, endocrine and musculo-skeletal disorders. There are additional learning experiences in career opportunities, independent study, and development of judgmental concepts under the supervision of a faculty member. Clinical experience is provided in Mercy Hospital.

### LPNr 0115 — Practical Nursing V (6)

Prereq. LPNr 0111.

A study of the child in health and illness and the influence of the various factors contributing to growth and development. Experience is obtained at Mercy Hospital and by observation in the Pediatric Clinic, Happy Hearts School and Day Care Center.

### LPNr 0116 — Practical Nursing VI (8)

Prerea, LPNr 0115.

This is a course in maternal and newborn nursing. It includes study and care of the mother during pregnancy, the delivery and postpartum; and study and care of the newborn. Concurrent learning experience is provided in Scioto Memorial Hospital and by observation in the Prenatal Clinic.

# PARK AND RECREATION ADMINISTRATION

### PRAd 0101 — Introduction to Recreation (3)

A study of the general concepts of recreation with a concept of tourism included. What recreation is; its history and development and importance. Laboratory work designed to get students into the park areas.

### PRAd 0102 -- Soil Management (4)

Prereq. or Concurrent or Permission of Instructor: Field Biology and General Ecology.

The student is introduced into the basic principles of soils, and management and fertility. The physical and chemical properties of soil, and soil and water conservation techniques are discussed. Soil materials formation and classification of soil. Land soil organisms are covered.

#### PRAd 0103 — Hydrology (3)

Prereq. or Concurrent or Permission of Instructor: Soil Management. Water is one of the most important of the natural resources. In this course the student will become aware of conservation of water practices, as well as studying the many aspects of the hydrologic cycle. Special emphasis will be placed on transpiration and evaporation, run-off, and ground water.

#### PRAd 0104 — Taxonomy of the Vertebrates (4)

Prereg. or Concurrent or Permission of Instructor: Ecology.

Classification of the higher animals with particular attention to the Ohio species. Field identification of birds, reptiles, amphibians, and mammals of Ohio will be emphasized in the laboratory.

#### PRAd 0105 — Water Pollution and Sanitation (3)

The study of the interdependency of discipline in evaluating water quality. Tests and measurements used in water quality evaluation will be performed in the chemistry and physics laboratories. The ability and knowledge to analyze findings and results will be applied. Solid waste disposal, sewage, water supply, insect control and odor control will be studied.

#### PRAd 0121 — Parks and Recreation Internship (6)

Eleven weeks' supervised work experience. Supervisory visits by instructor. Weekly seminars for critique of experience. Weekly evaluation reports. 15 hours credit.

#### PRAd 0122 — Seminar for Critique of Experience (2)

Weekly evaluation report.

#### PRAd 0201 — Outdoor Recreation (4)

Prereq. or Concurrent or Permission of Instructor: Introduction to Recreation.

Study and application of boating, swimming, canoeing, camping, etc. Emphasis on appreciation of wildlife and natural resources. History development and significance of outdoor recreation at the local, state, and federal levels. Provide camping experiences in canoeing, cooking, and the packing of bed rolls.

#### PRAd 0202 — Forest Management and Recreation (4)

An introduction to silvics and forest management principles, with emphasis on the forest preserve. Attention will be given to forest mensuration. Problems unique to forest recreation will be considered.

#### PRAd 0203 — Fiscal Operations (4)

A study of the various means of financing park operations; including general bonds, revenue bonds, and self operation of revenue-producing complexes.

#### PRAd 0204 — Recreational Park Layout and Design (3)

The theories and basic principles of designing recreational parks. Practical application in studying areas for parks. An elementary course in land surveying, including the theory of measurements, solution of triangles, angles, bearings, aximuths, lines, and angular measurements. Blueprint reading, writing of Educational Specifications for bids.

#### PRAd 0205 - Water Recreation (4)

Prereq. or Concurrent or Permission of Instructor: Introduction to Recreation and Outdoor Recreation.

Study of water-related facilities such as marinas and of boating law, operation and safety. Consideration of all forms of water recreation. Beach and Pool maintenance will be considered.

#### PRAd 0206 — Park Protection (4)

Prereq. or Concurrent or Permission of Instructor: Maintenance of Recreational Areas II and 2nd year standing.

Study of laws pertaining to parks and recreational areas, managers' responsibilities, law enforcement, crowd control techniques, control of vandalism. Public safety.

#### PRAd 0207 — Seminar (2)

A discussion-type course designed to bring together the ideas and facts learned in the two years of training. Special problems in Water and Outdoor Recreation will be introduced with the student attempting to solve them by using his Recreational Technology training.

#### PRAd 0208 — Orientation to Employment (1)

Prereq. 2nd year standing.

Job applications, personal interviews, references, data sheets, what the employer expects from employee, what the employee would expect from the employer. Job security, fringe benefits, opportunity for advancement.

#### PRAd 0209 — Wildlife Management (3)

Prereg. or Concurrent: Taxonomy of Vertebrates.

The principles of wildlife management in the conservation of all wildlife resources with emphasis on terrestrial communities. General wildlife management techniques are considered in the laboratory segments. Emphasis to be placed on the interactions of the wildlife population with conflicting forest interests. Include general values of wildlife management.

#### PRAd 0211 — Maintenance of Recreational Areas I (3)

Maintenance of park grounds, outdoor recreational areas, boating and swimming areas, maintenance of turf and golf courses.

### PRAd 0212 — Maintenance of Recreational Areas II (3)

Prereq. or Concurrent: Maintenance of Recreational Areas I.

Maintenance of park and recreational buildings, maintenance of machinery. Study of safety to employees while on the job. Vehicle maintenance and equipment.

### **PHARMACY**

#### Phar 0101 — General Pharmacology (4)

Introduction to the General principles of pharmacology. Calculations, drug classification, and the sites and mechanisms of drug action.

### **PHILOSOPHY**

#### Phil 0101 --- Fundamentals (4)

Survey of basic problems, concepts and methods in philosophy.

#### Phil 0102 — Introduction to Logic (4)

Use of evidence in establishing reliable conclusions.

#### Phil 0103 — Moral Philosophy (4)

Discussion of classic and/or modern philosophical views of human values, ideals and morality. Provides an introductory survey of some of the main problems, concepts and results of ethics including selected philosophies of past and present.

### PHYSICAL SCIENCE

### PSci 0101 — Physical World (4)

Designed for nonscience majors. Fundamental ideas of measurement, motion, energy, sound, light, electricity, and magnetism and astronomy. Topics in astronomy include solar system, time, moon phases, tides, eclipses, sun and galaxies. 3 lec. 3 labs.

### PSci 0102 — Physical World (4)

Prereg. 101 or equiv.

Designed for nonscience majors. Fundamental ideas of heat, nuclear physics, atomic physics and chemistry. Topics in chemistry include classification of elements, molecules, chemical reactions, solutions and large molecules, including plastics and DNA. 3 lec. 3 labs.

### PSci 0103 — Physical World (4)

Prereq. 101 or equiv.

Designed for nonscience majors. Fundamental ideas of meteorology and geology. Topics in meteorology include atmosphere, winds, clouds, storms and weather. Topics in geology include rocks and minerals, gradation, earthquakes, continental drift and the ocean. 3 lec. 3 labs.

#### PSci — 0105 — Physical Science (5)

A course designed for students of nursing and other health technologies, stressing the principles of physics and chemistry relevant to the health sciences. Meaningful applications in common experiences also are noted, so that the course should be worthwhile for students in other fields who would like a health-science emphasis. 4 lec. 3 lab.

### **PHYSICS**

#### Phys 0100 — Physics (Basic) (5)

A study of the more important principles of mechanics, heat, light, sound, and electricity. Problem solving and qualitative description of physical principles. Lectures and laboratory demonstrations. 4 lec. 3 labs.

### Phys 0201 — Physics (Mechanics) (4)

Prereq. Math 0130 or Math 0108 or equiv.

Basic measuring systems, methods and conversions and calculations for physics. Properties of solids, liquids, and gases. Statics and motion. Friction. Work, power, and energy. Simple machines. Laboratory and demonstrations related to lecture. 3 lec. 3 labs.

### Phys 0202 — Physics (Electricity) (4)

Prereq. Physics 0201.

An introduction to electrical circuitry with emphasis on the concepts of electrical physics. The nature of magnetism and electrostatics, electrical units. Basic direct-current circuits, Ohm's law, electrical measurement. Sources and effects of electrical current, cells. Electric power and energy. Electromagnetism and electromagnetic induction. Properties of alternating current, simple A-C circuits. Generators and motors, 3 lec. 3 labs.

### Phys 0203 — Physics (Heat, Light, Sound) (4)

Prereq. Physics 0201.

Fundamental properties and basic principles of heat, light and sound. 3 lec. 3 labs.

### PLASTICS ENGINEERING

### PEng 0101 — Introduction to Plastics (3)

Covers a description of the different plastics, beginning with a brief outline of polymer chemistry. Discussion will cover different types of plastic, identification tests, polymerization, molecular growth, and molecular weight. Laboratory experiences in extrusion, injection molding, thermoforming, compression molding, and other fabrication operations. Introduction to test methods.

#### PEng 0102 — Machine Tools I (3)

Safety, measuring tools, bench work, drill press, lathe, forge work, shaper, planer, milling machine, grinding machine, hydraulic power transmission, metal band saws, properties and uses of ferrous and non-ferrous alloys, cutting fluids, welding and foundry practices.

#### PEng 0103 — Extrusion Molding (3)

Prereg. PEng 0101 or advisor approval.

Techniques of plastics extrusion operations and blow molding: Pipe, sheet, film blowing, extrusion coating, wire and cable covering, thread (monofilaments), bottle blow molding. Laboratory involves operating extrusion equipment and blow molding equipment.

#### PEng 0104 — Thermo-Forming (3)

Prereg. PEng 0101 or advisor approval.

Discussion will cover thermo-forming processes and thermo-forming equipment. Thermo-forming will be introduced with special emphasis on vacuum-forming equipment and processes. Characteristics of common plastics used in thermo-forming. Numerous laboratory projects.

#### PEng 0105 — Injection Molding (3)

Prereq. PEng 0101 or advisor approval.

Techniques of injection molding processes, compression molding, and rotational molding. Mold design. Laboratory operation of injection molding equipment, rotational molding equipment, and compression molding equipment. Design and fabrication of molds.

#### PEng 0201 — Plastic Finishing (4)

Prereg. PEng 0101 or advisor approval.

Areas covered include printing, cementing, electroplating, vacuum metalizing, hot stamping, polishing, engraving, welding, sanding, drilling, casting resins and foam processes (polyurethane and polystyrene). Laboratory covers the practical applications of the lecture material.

#### PEng 0202 — Production Control and Planning (4)

Basic concepts of production planning and control methods. Inventory planning, facilities design, capacity considerations. Actual planning and scheduling exercises on an individual basis.

#### PEng 0203 — Testing of Plastic Materials (3)

Prereq. Math 0131.

Study is made of the mechanical, electrical, optical, and environmental characteristics of different plastics, impact testing, chemical testing, heat stability testing, hardness testing, and electrical testing. Conducting experiments and writing of technical reports on the property changes of plastics under various conditions. Statistical quality control methods as related to testing.

#### PEng 0204 — Industrial Economics (4)

An introduction to economic principles as applied to plant operation. Equipment sizing, costing, return on investment, depreciation of buildings and equipment, venture analysis, product costing, cost accounting and related financial statements.

#### PEng 0205 - Plant Layout and Materials Handling (3)

Prereg. EnDr 0101.

Principles of plant layout to obtain the most effective utilization of men, materials, and machines, as related to space and cost. Selection and use of modern equipment and methods for handling materials in industrial processes.

#### PEng 0206 — Introduction to Chemical Engineering (3)

Prereq. Chem 0121 and Math 0131.

Introduction to the practices of chemical engineering. Stoichiometry, heat and material balances, heat, mass, and momentum transfer. Industrial problems and applications.

# PEng 0207 — Fundamentals of Processing Equipment and Maintenance (2)

Piping diagrams, heat exchangers, reactors, etc., commonly used in the chemical industry. Emphasis on maintenance problems and methods.

#### PEng 0209 — Fabrication and Manufacturing of Plastic Products (4)

Prereg, PEng 0101, 0103, 0104, and 0105.

Review of industrial manufacturing methods for plastics products. Survey of the technical literature and projects related to new techniques in manufacturing. Emphasis on fiber-reinforced plastics and products.

#### PEng 0210 — Properties of Materials (4)

Prereg, Chem 0122 and Math 0131.

Study of various plastics with special emphasis on fitting the proper plastic to the correct end use. Problems will be introduced requiring the practical use of the theory developed in lecture. Properties such as ability to wield, decorate, and form (extrusion, injection, thermoforming) will be discussed.

### **PSYCHOLOGY**

### Psyc 0101 — Principles of Psychology (4)

Introduction to psychology. A study of the individual in terms of maturational, learning, thinking, emotional, motivational, sensory and perceptual processes.

#### Psyc 0131 — Human Adjustment (3)

Prerea, Psyc 0101.

A consideration of conflicts and problems of adjustment in modern society.

#### Psyc 0132 — Human Behavior (3)

A basis for the consideration of human behavior problems and an understanding of oneself. Psychological principles and techniques in present-day industry. Analysis of modern socio-industrial society.

#### Psvc 0173 — Human Growth and Development (4)

Prereg. Psyc 0101.

A study of the factors affecting human growth and development through the life cycle.

#### Psyc 0226 — Experimental Psychology (5)

Prereg. Psyc 0101 and Math 0221

Training in scientific methods and techniques of modern experimental psychology with individual reports of laboratory experiments.

#### Psyc 0241 — Behavioral Measurement (5)

Prereq. Psyc 0101 and Math 0221.

Testing and measurement; basic criteria including objectivity, reliability, validity. Methods of test construction and validation, including questionnaire construction.

#### Psyc 0261 — Industrial Psychology (5)

Prereg. Psyc 0101 and Math 0221.

Applications of psychology in business and industry.

#### Psyc 0270 — Abnormal Psychology (4/5)

Behavior disorders, their cause and effects on person, family and society.

#### Psyc 0275 — Educational Psychology (5)

Prereg. Psyc

Psychological foundations of education, with emphasis upon learning, transfer, motivation, and evaluation.

#### Psyc 0290 — Independent Study in Psychology (1-3)

Prereq. Permission of instructor is required.

Problems of special interest to the student are investigated under the direction of the psychology staff. This course is open only to second year students who have accumulated a 3.000 average. This course may be repeated once but not to exceed a total of six credit hours.

#### QUANTITATIVE METHODS

#### QMet 0200 - Introduction to Business Data Processing (4)

Prereq. Math 0201 and 0202.

Role of computer in a business environment. Introductory study of equipment, applications, flow charting and FORTRAN program language. Concepts of random variables and probability distributions.

#### QMet 0201 — Introduction to Probabilities and Statistics (4)

Prereg. 0200.

Theoretical distributions, sampling, estimation (point and interval), hypothesis testing, simple regression and correlation.

### **RADIOLOGIC (X-RAY)**

#### RdIT 0101 — Radiologic Technology I (2)

This course concentrates on the following requirements of the American Medical Association: Orientation and elementary radiation protection, professional ethics, office procedures, medical terminology, film critique, and radiographic positioning.

#### RdIT 0102 — Radiologic Technology II (2)

This course concentrates on the following requirements of the American Medical Association: Radiologic terminology, principles of radiographic exposure, film critique, and radiographic positioning.

#### RdIT 0103 — Radiologic Technology III (3)

This course concentrates on the following requirements of the American Medical Association: Radiographic positioning, principles of radiolographic exposure, nursing procedures pertaining to radiology, pediatric radiography, and film critique.

#### RdIT 0104 — Radiologic Technology IV (3)

This course concentrates on the following requirements of the American Medical Association: Common radiographic procedures using contrast media, radiographic practices for surgery, topographic anatomy, radiographic positioning, and film critique.

#### RdIT 0105 — Radiologic Technology V (4)

This course concentrates on the following requirements of the American Medical Association: Darkroom chemistry and technique, radiographic positioning, special radiographic procedures, and film critique.

#### RdIT 0106 — Radiologic Technology VI (4)

This course concentrates on the following requirements of the American Medical Association: Special radiographic procedures, radiographic positioning, use of contrast media, and film critique.

### RdIT 0107 — Radiologic Technology VII (4)

This course concentrates on the following requirements of the American Medical Association: Radiographic positioning, principles of radiographic exposure, departmental administration, and film critique.

### RdiT 0108 — Radiologic Technology VIII (4)

This course concentrates on the following requirements of the American Medical Association: Equipment maintenance, general review, and film critique.

### RdIT 0111 - Physics (Radiologic) (4)

A study of the fundamental methods of x-ray generation and its relationship to radiation protection in radiology, production and control of high voltage, electrical hazards, methods of rectification, with special emphasis on modern x-ray tubes, three-phase generators, basic x-ray circuits, x-ray dosimetry, fluoroscopy, and image intensifiers.

### RdIT 0200 - Basic Patient Care (4)

The content of this course is selected to provide the student in the allied health curricula with a knowledge of the primary aspects of basic care of the ill.

### RdIT 0201 — Radiographic Exposure I (3)

Lectures on establishing and manipulating radiographic exposure factors and on the proper utilization of accessory devices such as grids, intensifying screens, and beam limitation devices. The concentration is on overall image quality, as well as factors affecting patient exposure.

### RdIT 0211 - Practicum I (6)

Supervised sessions emphasizing the practical application of theory. Students will be scheduled a minimum of 32 clock hours each week for hospital-based practicum.

### RdIT 0212 - Practicum II (6)

Supervised sessions emphasizing the practical application of theory. Students will be scheduled a minimum of 32 clock hours each week for hospital-based practicum.

### RdiT 0213 — Practicum III (6)

Supervised sessions emphasizing the practical application of theory. Students will be scheduled a minimum of 32 clock hours each week for hospital-based practicum.

### RdiT 0214 - Practicum IV (6)

Supervised sessions emphasizing the practical application of theory. Students will be scheduled a minimum of 32 clock hours each week for hospital-based practicum.

#### RdIT 0221 — Seminar I (2)

Student participation in areas such as ethics and responsibilities in the Radiology Department. Consideration of other allied health occupations, the value of research to radiation sciences, and management problems for the technicians. A problem of special interest requiring library and/or clinical study will be selected by the student and the faculty coordinator.

### RdiT 0222 — Seminar II (2)

Student participation in areas such as ethics and responsibilities in the Radiology Department. Consideration of other allied health occupations, the value of research to radiation sciences, and management problems for the technicians. A problem of special interest requiring library and/or clinical study will be selected by the student and the faculty coordinator.

### RdIT 0223 - Seminar III (2)

Student participation in areas such as ethics and responsibilities in the Radiology Department. Consideration of other allied health occupations, the value of research to radiation sciences, and management problems for the technicians. A problem of special interest requiring library and/or clinical study will be selected by the student and the faculty coordinator.

### RdiT 0224 — Seminar IV (2)

Student participation in areas such as ethics and responsibilities in the Radiology Department. Consideration of other allied health occupations, the value of research to radiation sciences, and management problems for the technicians. A problem of special interest requiring library and/or clinical study will be selected by the Student and the faculty coordinator.

# **REAL ESTATE COURSES**

# BaFT 0210 — Real Estate Principles and Practices (4)

A basic course designed as an introduction to real estate economics and administration to develop professional real estate personnel and to promote an opportunity for those not in the real estate business to obtain basic knowledge about real estate for their own benefit in handling real estate problems.

The course covers the elementary physical, legal, locational and economical characteristics of real estate; real estate markets; and national, regional and local economic influences on real estate values. It also provides a foundation for further study and serves as a preparation for securing a license.

# BaFT 0211 - Real Estate Brokerage (4)

A basic course in real estate economics, brokerage and administration, designed for the professional development of real estate personnel and to serve those who are not in the real estate business but desire to learn about real estate for their general knowledge and private business arrangements.

This course covers property ownership and rights, real estate brokerage and construction, marketing, and production, land development and construction of buildings, and effects of marketing and production systems in our economy.

## BaFT 0212 — Real Estate Law (4)

Real Estate Law includes all of the areas of law commonly concerned with the typical real estate practitioner and investor-consumer.

Among topics covered in this course is the law of agency as applied to real estate brokers and salesmen, law of fixtures, estates (including leases), conveyancing of real estate, real estate managers, license laws of Ohio, zoning, cooperatives and condominiums.

### BaFT 0213 -- Real Estate Finance (4)

Real Estate Finance includes information concerning the institutions, methods, instruments and procedures involved in the financing of real estate.

It includes the nature and characteristics of the mortgage loans, government influence on real estate finance, and the nature of the mortgage market. Effects of monetary and fiscal policies on real estate financing are considered.

### BaFT 0214 — Real Estate Appraisal (4)

The course in Real Estate Appraisal stresses the methodology of appraising urban real property and the theory underlying appraisal techniques.

The three basic techniques of appraising  $\dots$  market comparison, penalized cost of replacement, and income capitalization, are covered in depth.

A term project is assigned to give the student practical experience in applying these techniques.

# BaFT 0215 — Special Topics or Seminar in Real Estate (4)

Special Topics or Seminar in Real Estate (title may vary from institution to institution) includes areas requiring specialized knowledge such as taxation, investment analysis, industrial real estate, commercial real estate, and other types of income producing property. Current issues and problems facing the real estate business are also considered.

This course should be offered to those persons who have previously completed the necessary basic courses.

This course is designed to cover specialized material not covered in the other five courses as well as the current real estate market, legislative activities, and long range planning for the future of real estate.

Recommended prerequisites for this course are: Principles and Practices I & II, Real Estate Law, Real Estate Finance, Real Estate Appraisal.

# Real Estate Salesman's Program

Persons wishing to take the Ohio examination for real estate salesmen must first successfully complete a practices course and Real Estate Law. Both of these courses are offered at Shawnee State.

# RESPIRATORY THERAPY

# RpTT 0101 — Introduction to Respiratory Therapy (2)

An introduction to respiratory therapy including discussion of the role of respiratory therapy in current medical practice and duties, responsibilities and professional liabilities of the technician. Field trips to the clinical facilities will be included to cover respiratory therapy department structure and administration. Also, a review of professional organization and education opportunities will be incorporated.

# RpTT 0102 — Introduction to Respiratory Therapy Equipment (3)

A study of the apparatus utilized in providing respiratory care, including gas cylinders, regulators, flowmeters and indexing systems. Also to include disposable and reuseable humidifiers and nebulizers.

# RpTT 0111 — Clinical Practice I (6)

An introduction in a clinical setting for the Respiratory Therapy Technician. Instruction in and practical application of procedures and equipment including safe storage and handling of medical gases, oxygen administration, humidification and aerosols.

# RpTT 0112 — Clinical Practice II (6)

A continuation of Clinical Practice I giving further attention in a clinical setting to application of cardio-pulmonary resuscitation, airway management, intermittent positive pressure breathing and cardio-respiratory drugs.

### RpTT 0113 — Clinical Practice III (6)

Theory review and practical application of procedures related to continuous ventilation and respiratory care of the critically ill patient.

#### RpTT 0114 — Clinical Practice IV (6)

A continuation of Clinical Practice III with emphasis on alternatives to intermittent positive pressure breathing, pulmonary rehabilitation and pulmonary function testing.

#### RpTT 0121 — Cardio-pulmonary Physiology (4)

A study of the physiology of the cardiovascular and pulmonary systems involving mechanics of breathing, control of respiration, respiration of alveolar gases and blood gases. A survey of pathology including hypoxia, airway obstruction, pulmonary distention, ventilation-perfusion imbalance and pulmonary restriction.

#### RpTT 0201 — Clinical Specialties (3)

A study of respiratory therapy applications in medical practice, including pathology in internal medicine, neurology, surgery, pediatrics and obstetrics emphasizing the role of the respiratory technician as a member of the specialized health care team.

#### RpTT 0202 — Pharmacology for Respiratory Therapy (4)

A study of the general principles of pharmacology including drug types, dispensing, dosage, effects including contraindications and regulations. Drug groups related to respiratory therapy will be emphasized to include bronchodilators, wetting agents, detergents, mucolytics, proteolytics, antibiotics and steroids.

#### RpTT 0211 — Respiratory Therapy Procedures I (3)

A discussion of airway management, cardio-pulmonary resuscitation, intermittent positive pressure breathing and chest physiotherapy.

#### RoTT 0212 - Respiratory Procedures II (3)

A study of the principles and practices of intensive respiratory care including cardio-pulmonary emergencies, continuous ventilation and blood gas analysis. Included is a survey of various ventilation techniques and weaning from mechanical ventilation procedures.

### RETAIL MARKETING MANAGEMENT

#### RMMT 0101 — Introduction to Business (3)

A survey course of the basic functions of American business, with an emphasis upon the responsibility of businesses as a vital segment of society. The course introduces the American economic system and the role of profits as the motivating force behind U.S. business activity. Case problems and supplementary readings provide exposure to divergent opinion about the subject of business.

#### RMMT 0102 — Marketing (4)

A study of marketing fundamentals, consumption and consumer behavior, retailing and wholesaling structures; and the functions performed in marketing, marketing policies and a critical appraisal of the field of marketing.

#### RMMT 0103 — Introduction to Retailing (4)

Principles and methods of retail management, including organization, policy making, location, operation, selling services, records, inventory, expense control, insurance and the coordination of a store.

#### RMMT 0104 — Salesmanship (3)

A course structured to acquaint the student with the basic concepts of personal selling at both the industrial and retail level including preparation for selling, sales processes, and an introduction to sales management. Emphasis on retail selling. Students are made aware of the wide variety of careers open to them in retail selling.

#### RMMT 0223 — Retail Buying (4)

Prerea. Marketing or permission of instructor.

This course will provide a basic understanding of the retail buyer's responsibilities and functions and create an awareness of the complexity of the buyer's job. In addition, the course will provide the student with actual opportunity to acquire some of the basic skills that are used by the retail buyer in determining demand, purchasing, choosing sources and negotiating, and pricing.

#### RMMT 0225 - Retail Case Studies (3)

To give the student an opportunity to report and discuss retail problems in a group situation. Problems discussed are concerned with areas of retail management, planning, personnel, store layout, inventory control, customer services and salesmanship.

#### RMMT 0227 — Credit and Collection (4)

The organization of this course grants the student an appreciation of the economic and social implications of credit and exposes him to the specific type of credit. It presents the vital principles of credit management as well as the everyday experience of an actual credit manager.

#### RMMT 0233 — Sales Promotion (3)

Prereq. Marketing or permission.

A course designed to provide the student with a basic background, which will enable him to effectively create, transmit and manage product information and messages from the seller to the buyer, resulting in the desired response by the buyer. Emphasis is placed on defining the potential consumer and his behavior, selecting the proper promotional methods, and managing the promotional program.

#### RMMT 0235 — Advertising (3)

Prereq. Marketing or permission of instructor.

A study of the principles of advertising stressing the history and development of advertising; its relation to the marketing effort of the firm; its relation to consumers and society in general; the major groups of media used by the advertiser; the creation, planning and management of advertising.

### RMMT 0236 — Special Topics in Retailing (2)

An independent research study of a particular area of the retailing industry which interests the student. Prerequisite: Sophomore standing, permission of full-time retail instructor and Introduction to Retailing.

#### RMMT 0240 — Retail Accounting (3)

An analysis of accounting and mathematical problems facing the retail manager, including financial statement ratios, department and branch accounting, inventory evaluation methods, turnover ratios and comparisons, pricing policies, profit planning and control, and calculation of returns on investment based on alternate investment decisions.

#### RMMT 0301 — Principles of Management (4)

An introductory course into management concepts, organization and principles with a detailed analysis of the management functions of planning, organizing, staffing, directing and controlling. Communications, decision making and motivation are emphasized as intrical concepts in performing the management functions.

#### RMMT 0302 — Personnel Management (3)

The philosophy, principles, and methods of personnel management; organizational structure, areas of responsibility and authority, policy making, procurement and placement, training, evaluation, wage and salary administration and benefit programs.

### RMMT 0310 — Retail Internship (6)

Prereq. A minimum of 13 hours in retailing selected from the following: Marketing, Introduction to Retailing, Salesmanship or Retail Accounting plus 36 approved credit hours. Permission of the Retail Mid-Management Coordinator may be granted in special situations. A minimum 2.0 overall average is required.

The intern program combines study and work experience to give the student self-direction in his career preparation and to familiarize the student with retail management as it actually works. This process of learning through the interaction of study and work experience benefits the student by enhancing his personal development, vocational or professional preparation, and his general education.

### RMMT 0311 — Special Problems in Retailing (2)

The student applies his practical knowledge of retailing to specific areas of his job. Special problems confronted by the student on the job are prepared in report form to be submitted to his supervisor-coordinator. A special project is required to be completed during his internship quarter. Through this project, the student is expected to become familiar with company methods, policies and procedures.

### SOCIAL SCIENCE

### SoSc 0210 — Introduction to Urban Studies (4)

No prereq. required, but Govt 201 is recommended. Current information from various disciplines in the social sciences will be integrated to explain the phenomenon of urban growth and to

be integrated to explain the phenomenon of urban growth and to examine problems in selected areas of interest, i.e., education, housing, transportation, land use, etc.

### SoSc 0299 — Interdisciplinary Special Topics in the Social Sciences (4)

Course will draw upon the various disciplines in the social sciences.

### **SOCIAL SERVICE**

### SSTc 0102 — Introduction to Social Services (3)

This course will present an overview of the social work profession to the student. Special areas of concern will include social work philosophy and values, types of practitioners, as well as the organization and purpose of social work agencies.

### SSTc 0103 — Contemporary Social Problems (3)

Prereq. Soci 0101.

Social issues in contemporary America. Society responses to structural defects in society.

### SSTc 0104 — Personal Growth and Development (2)

A study of how to work with patients/clients, professional people, personal hygiene and office attire, refinement of oral communications with emphasis on conference forms, leadership, and techniques.

### SSTc 0105 — Marriage and the Family (3)

Prereq. Soci 0101.

A study of the American family system; domestic relations law, courtship, marriage processes, factors associated with successful and unsuccessful marriages. Visitation with local ministers to discuss problems encountered.

#### SSTc 0106 — Rehabilitation (2)

A study of the rehabilitation process. A study of the laws and legislation influencing the rehabilitation process. Visitations and conferences with personnel involved in rehabilitation.

### SSTc 0107 — Sociology of Education (4)

An examination of education as a social institution. Social factors influencing learning, teaching and school programs. Social trends and problems in education.

### SSTc 0111-0115 — Social Services Internship I-V (2)

Prereq. SSTc 0102.

This internship program involves the student in applying his classroom studies in the field. Group of 4 to 6 students are assigned to work with counselors, caseworkers, etc. in social work areas.

### SSTc 0201 — Public and Child Welfare (3)

Contemporary organization, functions, and needs at local, state, and national levels, including social security system. Field experience with caseworkers. Visitation to Welfare Office, Social Security Administration, Vocational Rehabilitation Centers, etc.

### SSTc 0203 — Gerontology (3)

A study of the life style and problems encountered by the aged.

### SSTC 0204 — Social Group Work (2)

Orientation to the process and techniques of social group work, the agencies using this method, and trends in the field.

### SSTc 0205 — Historic Background to Urban Society (3)

A survey of the evolution of urban society, emphasizing the development of change in American culture patterns. Field trip to urban area, and visitations to homes in different geographic regions.

### SSTc 0207 — U.S. Minority Groups (3)

Examination of minority groups, causes and consequences of prejudice and discrimination.

# SSTc 0208 — The Community and Community Resources (3)

The American community as a social system. Emphasis on ecology, stratification, and social power.

### SSTc 0209 — Seminar (2)

Course designed for students to do individual research related to their particular area of interest in Social Services.

### SSTc 0210 - Medical Sociology (3)

Sociological concepts of illness and health; structure, role, rank, and value of health personnel and patients.

# SSTc 0211 — Social Problems and Police Relations (3)

Use of sociological perspective to analyze major social problems including causes, treatment, and prevention. Consideration of the ways the community and police allocate its resources to deal with problems. Analysis includes such problems as race relations, poverty, crime, delinquency, population, and work.

### SSTc 0212 — Penology and Corrections (4)

Societal reactions to offenders against law, viewed historically and cross-culturally.

### **SOCIAL WORK**

# SoWr 0101 — Introduction to Social Welfare and Social Work (3)

Overview of field of social welfare with equal emphasis on fundamental concepts and services in social welfare and current and emerging tasks in profession of social work.

### SOCIOLOGY

### Soci 0101 — Principles of Sociology (4)

Nature of human society and factors affecting its development. Fundamental concepts of sociology: culture, collective behavior, personality, groups, institutions.

### Soci 0201 — Current Social Problems (4)

Prereg. Soci 0101.

An examination of the ways in which society comes to define certain conditions as social problems, a descriptive survey of the nature and distribution of contemporary American social problems, and a discussion of the various theoretical orientations used in classifying social problems. Problems under study would include crime and juvenite delinquency, alcoholism and drug abuse, poverty, mental disorder, family disintegration, and problems arising out of discrimination against ethnic minorities and women in American culture.

### Soci 0202 — Introduction to Family Sociology (4)

Prereq. Soci 0101.

Cross-cultural analysis of family systems. Primary emphasis on American family: courtship, marriage and family relationships.

# Soci 0203 — Introduction to Social Psychology (4)

Prereq. Soci 0101.

Patterning of conduct through social interaction; functional analysis of individual-group relationships in various organizational contexts; current theory and research in the field.

### Soci 0205 — Sociology of Appalachia (4)

Prereg. Soci 0101.

Intensive study of Appalachia from sociological perspective. Emphasis on population of Appalachia (number and distribution of inhabitants, characteristics of population, vital processes and migration), "culture of rural poverty," acceptance of innovation and social change in Appalachia, major social institutions in the area and community power structure in Appalachia.

### **SPANISH**

### Span 0111 — Elementary Spanish (4)

Development of comprehension, speaking and reading skills. Basic grammar. Lab required. Beginning course of 3-qtr. 1st-yr. sequence.

### Span 0112 — Elementary Spanish (4)

Prereq. 0111.

Continuation of 0111

### Span 0113 — Elementary Spanish (4)

Prereq. 0112

Continuation of 0112.

### Span 0211 — Intermediate Spanish I (4)

Prereq. Span 0113 or instructor's approval.

Reviews grammar. Offers selected readings in Hispanic literature. Oral facility is emphasized. 3 lec. 2 labs.

### Span 0222 — Intermediate Spanish II (4)

Prereq. Span 0211 or instructor's approval.

Emphasizes oral and written expression. Continues intensive review of grammar. Selected readings in Hispanic literature are stressed. 3 lec. 2 labs.

### Span 0223 — Intermediate Spanish III (4)

Prereq. Span 0222 or instructor's approval.

Emphasizes the building of more advanced vocabulary and sentence structure through more difficult prose. Increasing emphasis is placed on conversation and free composition. 3 lec. 2 labs.

### **SPEECH**

### Spch 0101 — Speech I (3)

Public speaking employing principles of effective oral communication. Practice in presenting informative and persuasive speeches with emphasis on the communicative process.

#### Spch 0102 - Speech II (3)

Analysis of role of oral communication in human relationships with consideration of a variety of interpersonal contexts; performance directed toward concentrated study of conference types.

# Spch 0105 — Introduction to Mass Communication (4)

All forms of mass communication including newspapers, magazines, radio-television, book publishing, public relations, advertising and photojournalism. Begins with an analysis of communication process and ends with media career opportunities.

### Spch 0110 — Listening Behavior (2)

Improvement of listening skills through intensive practice.

### Spch 0125 — Parliamentary Usage (3)

Theory and practice of parliamentary procedure as it applies to governmental and non-governmental organizations. Includes practice in organizing groups and conducting meetings.

### Spch 0205-A — Argumentation and Debate (4)

Basic principles of argumentative discourse including concepts of presumption, burden of proof, rhetorical forms of reasoning and evidence. Practice in applying of these principles.

### Spch 0205-B — Intercollegiate Debate (2)

Workshop for intercollegiate debating. Can use 4 hours toward degree.

# Spch 0205-C — Intercollegiate Debate (2)

Intercollegiate individual events competition.

### Spch 0215 — Group Discussion (4)

Study of structure and internal dynamics of small groups, nature and functions of leadership and group participation, problem solving and decision making; frequent participation in group discussion activities.

# Spch 0220 — Oral Interpretation of Literature (4)

Techniques of oral interpretation and development of adequate intellectual and emotional responsiveness to meaning of literature.

# Spch 0225 — Verbal Language Behavior (3)

Introduction to fundamental linguistic theory of verbal language production in message generation. Survey of voice and articulation characteristics.

# Spch 0230 — Communication Theory and Process (4)

Survey of selected humanistic and scientific approaches to communication studies. Emphasis on philosophical bases of communication theory.

### **THEATER**

### Thar 0100 — Introduction to Theatre (3)

Theatre as an art form, presented from the historical, literary and production point of view (Greeks to Present). 3 lec.

# Thar 0100 A, B, C — Theater - Shawnee Company (3-9)

Introductory study of theater performance and production.

### Thar 0201 — Children's Theatre (5)

A course designed to cover dramatic compositions and practical production procedures for child audiences.

## Thar 0215 — Principles of Acting (3)

Basic principles and techniques of acting.

# Thar 0220 — Oral Interpretation (3)

Techniques in oral interpretation and development of intellectual and emotional responsiveness to meaning of literature.

# Thar 0225 — Stage Costume and Make-up (3)

A course designed to cover the basic principles of stage costume and make-up.

### Thar 0230 - Music - Theatre (3)

Participation in selected musical theatre projects. Participation may be through production or performance.

# SHAWNEE STATE GENERAL AND TECHNICAL COLLEGE

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- Nancy Barnett English B.S. Ohio University; M.A. Marshall University
- Bill Beattie Parks & Recreation M.S., B.S. Ohio State University
- Mona Bias Government B.A. Marshall University; M.A. University of Maryland
- Forrest Colegrove Mathematics A.B. Ohio University; M.S. University of Wisconsin
- Shirley Crothers Music B.S. Ohio State University; M.A. Ohio University
- Lillian Davis Program Coordinator of Business Technology, Executive Secretarial B.S. Miami University; M.A. Marshall University
- Robert Decker Data Processing and Computer B.S. Indiana University
- Larry C. Essman Accounting M.A. Ohio University
- Larry Estepp Retail Mid-Management B.B.A. Ohio University; M.S. Marshall University
- Orville Ferguson, Jr. Civil Engineering B.S. West Virginia State College
- Cathleen Fluty English A.B., M.A. Marshall University
- Charles A. Francis, Jr. Director Radiologic Technology B.S. Ohio State University
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- Brenda Horr Practical Nursing A.D.N. Ohio University at Portsmouth
- C. Ray Irwin Program Coordinator of Engineering Technologies, Electro-Mechanical Engineering B.S.E.E. Ohio University
- Jack James Psychology and Sociology A.B., M.S., M.Div., Marshall University

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- Scott Oliver Biological Science B.S. Ohio University; D.D.S. Ohio State University College in Dentistry.
- Betty Robinson, RN Instructor, Program Coordinator Practical Nursing B.S. University of Cincinnati
- Sonya Scarff Practical Nursing Diploma Christ Hospital School of Nursing
- Lois Shumway Accounting B.A. Ohio Wesleyan University; M.A. New York University
- John Shupert Mathematics B.S. Ohio University; M.A. Louisiana State University; M.A. University of Illinois
- Kathleen Simon English A.B., M.A. Eastern Kentucky University Lyle Smith Plastics Engineering B.S. Ohio University
- Jack Spratt, Jr. Director, Dental Hygiene B.S., D.D.S. Ohio State University
- Charles Staggs Civil Engineering B.S. University of Kentucky Thomas D. Stead Art B.F.A., M.F.A. Ohio University
- Jerry Walke Psychology B.S. Capital University; M.S. Ohio University; Ph.D. Ohio State University
- Betty Waller Physical Education B.S.Ed. Miami University; M.S. Marshall University
- Harry Weinbrecht Physical Education B.S.Ed. Ohio University; M.S.PE Xavier University
- Linda Wooddell Practical Nursing B.S. University of Alabama School of Nursing.

# **CALENDAR FOR 77-78 ACADEMIC YEAR**

# Fall Quarter 1977

Sept. 12	Late registration
Sept. 13	Last day to pay fees or make arrangements with the Business Office
Sept. 13	First day of classes
Sept. 26	Last day to add a class or apply for pass/fail
Oct. 31	Last day to drop a class or apply for non-credit
Oct. 31-Nov. 14	Winter Quarter advising
Nov. 14-18	Registration week
Nov. 24	Thanksgiving Day
Nov. 25	Substitute Columbus Day
Dec. 2	Quarter ends
Dec. 5, 6, 7	Exams
Dec. 8	Grades Due
Dec. 23	Substitute Veterans Day
Dec. 26	Christmas holiday
Dec. 30	Substitute President's Day

# Winter Quarter 1978

New Year's holiday
Late registration
Last day to pay fees or make arrangements with the Business Office
First day of classes
Martin Luther King Day — classes will not meet and offices closed
Last day to add a class or apply for pass/fail
Spring Quarter advising
School Open — President's Day
Registration week
Last day to drop a class or apply for non-credit
Quarter Ends
Exams
Grades Due

# **Spring Quarter 1978**

Apr. 3	Late registration for Spring Quarter
Apr. 4	First day of classes
Apr. 4	Last day to pay fees or make arrangements with the Business Office
Apr. 17	Last day to add a class or apply for pass/fail
May 1-12	Advising period for Summer Quarter
May 16, 17, 18	Summer Quarter registration
May 22	Last day to drop a class or apply for non-credit
May 29	Memorial Day — No Classes
June 9	Quarter ends
June 12-14	Exams
June 15	Grades Due
June 17	Graduation

# **Summer Quarter 1978**

June 20	Late registration for Summer Quarter
June 21	First day of classes
June 21	Last day to pay fees or make arrangements with the Business Office
June 27	Last day to add a 5 week session course or apply for pass/fail
July 4	No school
July 5	Last day to add a full quarter course or apply for pass/fail
July 14	Last day to drop a 5 week session course or apply for non-credit
July 25	Last day of 5 week session
July 25	Exams for 5 week session
July 26	Grades due for 5 week session
Aug. 9	Last day to drop a full quarter course or apply for non-credit
Aug. 7-11	Orientation and advising for Fall Quarter
Aug. 14-18	Registration week for Fall Quarter
Aug. 28	Full Quarter ends
Aug. 29, 30	Exams
Aug. 31	Grades due

# Fall Quarter 1978

(Please call the college for more information on the '78-'79 school calendar)

