

# SHAWNEE STATE GENERAL AND TECHNICAL COLLEGE 1975 - 1977

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

**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

Art 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 Pharmacy 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 Mid-Management

## ASSOCIATE OF APPLIED SCIENCE DEGREE

**Allied Health Technologies** 

Dental Hygiene Medical Laboratory Practical Nursing (1 year program) Associate Degree Nursing Radiologic Technology Respiratory Therapy (1 year program) **Engineering Technologies** 

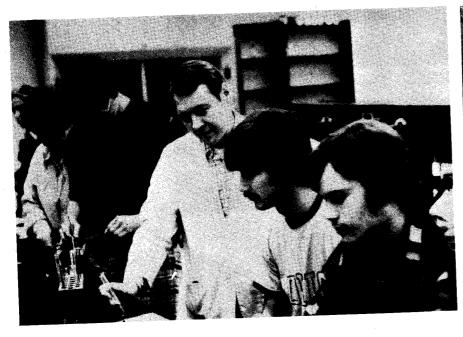
Chemical Technology Civil Engineering Electro-Mechanical Engineering

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 when enrolling in it. The catalog contains only a portion of what you should know about the college, however. For example, you should be aware that Shawnee State is a comprehensive institution which offers 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 is an open-door college that encourages people of all ages and backgrounds to enroll for a full two-year associate degree programs, one-year certificate programs, short-term retraining programs or courses and continuing education courses. 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 goals. You should 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 and is getting better all the time. 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 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

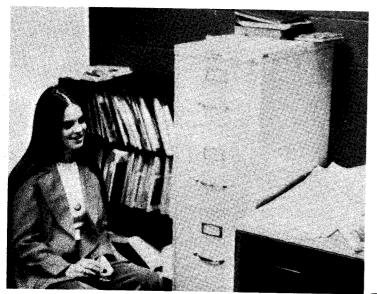
Bureau of Vocational Rehabilitation

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**

The state of the s	1	Mathematics/Science
Programs Offered At Shawnee State	3	Pre-Botany
A Message From the President	4	Pre-Chemistry
Accreditations	<u>.</u>	Pre-Dentistry
Technical Advisory Committees	9	Pre-Engineering
Admissions Procedures	11	Pre-Forestry
Academic Information	15	Pre-Medical Technology
Fees and Expenses	16	Pre-Medicine
Student Activities	17	Pre-Microbiology or Public Health & Sanitation
Student Services and Facilities	20	Pre-Optometry
Transfer or University Parallel Programs — Associate of Arts Degree	20	Pre-Pharmacy 4
Concentration Areas:	23	Pre-Physical Therapy
Education		Pre-Veterinary4
Elementary Education		Pre-Zoology
Special Education	25	Social Sciences
Biology — General Science	25	Pre-Business Administration
Chemistry – General Science		Government
Communications (English Emphasis)		Pre-History
Communications (Speech Emphasis)		Pre-Law
English Comprehensive		Pre-Psychology
General Speech (Speech Emphasis)		Pre-Social Work
General Speech (Theater Emphasis)		Pre-Sociology
Health		Academic Course Descriptions
Physical Education		Anthropology
Physics — General Science		Art
Social Studies		Biological Sciences
Humanities/Fine Arts		Business Law
Pre-Art Major	32	Chemistry
Pre-Communications (General) Major		Comparative Arts
Comparative Arts Concentration		Economics
Pre-English Major		Education
Pre-Journalism		Engineering Drawing
Pre-Theater	J-7	Engineering warming

English 52	
French	Executive Secretarial Technology
Geography 53	Retail Mid-Management Technology
Geography	Allied Health Technologies (Associate of Applied Science Degree) . 85
Government 53	Admissions Procedures
Government	Dental Hygiene
Health, Physical Education and Recreation	Medical Laboratory Technology
History	Radiologic Technology
Humanities	Respiratory Therapy Technician
Journalism	Nursing Admissions Procedures
	Nursing
Mathematics	Nursing
Music	Practical Nurse Program
Physical Science 59	Practical Nurse Program
Physical Science	Chemical Technology (Associate of Applied Science Degree) 108
Physics	Chemical Technology
Psychology	Civil Engineering Technology
Quantitative Methods	Electro-Mechanical Engineering Technology
neal Estate Courses	Plastics Engineering
Social Work	Public Service Technologies (Associate of Applied Science Degree) . 124
Social Science	Corrections Technology
Sociology	Social Services Technology
Spanish	Parks and Recreation Administration
Speech	Board of Trustees
meater	Administration
Associate of Individualized Studies Degree	Student Services
Developmental Courses	racuity
inter-institutional Advanced Study	1975-76 School Calendar
Graduate heartors institute Designation	College Map
Dusiness Technologies (Associate of Applied Business Degree) 70	
Accounting Lectuology	
Banking and Finance Technology	
Data Processing and Computer Tark	

# ADMISSIONS PROCEDURES ACADEMIC INFORMATION STUDENT SERVICES AND FACILITIES

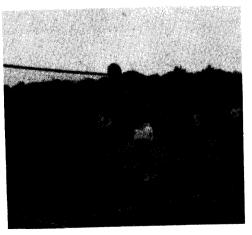
# FEES AND EXPENSES STUDENT ACTIVITIES











## **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 that have not completed high school or successfully completed the General Education Development Test for high school equivalency will be accepted for admissions on a part-time basis for one quarter. (Less than 12 hours credit.)

#### **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)

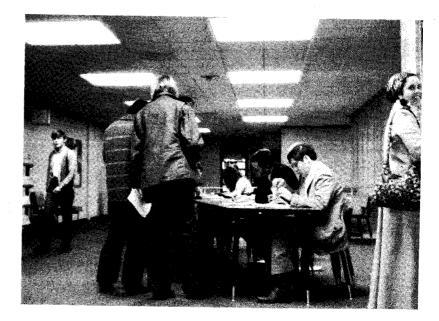
Admissions to Freshman studies is possible in the Fall, Winter, Spring, or Summer quarters, excepting programs in the Medical areas outlined above which are available only in the Fall quarter or by special permission of the Program Director.

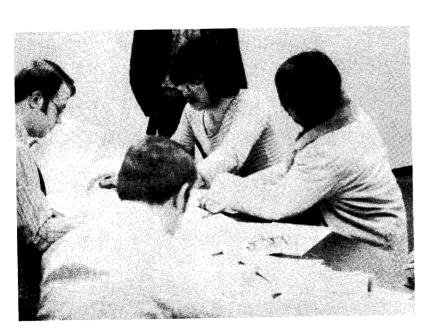
It is suggested that students applying for financial aid make application for admissions and financial aid before April 15. Applications for admissions and financial aid are accepted after that date, however, financial aid is awarded on a first-come-first-serve basis.

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 and a copy of the General Education Development Certificate on file.

#### 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.

#### 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 to audit any course of interest to them. Formal admissions is not required. Admissions to a course will be granted if space is available. No charge will be made to senior citizens to audit the course, however, registration is required.

#### **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.

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

#### **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 by the Registrar's Office. Grades will not be issued orally.

#### **Description of Grades**

Grade	Description	Quality Points
Ą	Excellent	4.00
<b>A</b> -		3.67
B+		3.33
В	Good	3.00
B-		2.67
C+		2.33
C	Average	2.00
C-		1.67
D+	_	1.33
D D-	Poor	1.00
F	<b>-</b>	0.67
т́с	<u>F</u> ailing	0
KE	Transfer Credit	0
NC	Credit by Exam	0
WD	No Credit	0
VVD	Withdrawal	0
P	Incomplete	0
r grade of "F	Pass " receives no credit A stude	0

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

**ACADEMIC INFORMATION** 



#### **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 registrar. 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 or the registrar.

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 registrar 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

The formula for calculating grade point ratio is:

**Total Quality Points** 

- = Grade Point Ratio **Total Hours Attempted** 

#### **Academic Probation**

Students achieving a grade point ratio of 1.5 or less for any quarter will be placed on academic probation for the following quarter. Students on academic probation will not be permitted to schedule more than 14 quarter hours of credit for that quarter.

A part-time student on academic probation will not be permitted to schedule over 8 quarter hours of credit.

#### Academic Dismissal

A student placed on academic probation for two consecutive quarters, or who achieves a grade point ratio of less than .75 for any one quarter is subject to academic dismissal.

Records of students subject to academic dismissal will be reviewed by the Dean of Student Services. 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 five class days of the quarter (three days of a 5-week summer session) with the permission of a counselor or the registrar.

Students may add a class to their schedule the second five class days of the quarter (4th, 5th, or 6th school day of the 5-week summer session) with the permission of a counselor, the registrar, and the faculty member responsible for the class.

## 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 the proper forms in the Student Services Office.

## Withdrawing from College

Students withdrawing from college when classes are in session should 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.

#### No 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

## **Credit by Arrangement**

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

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

#### 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 over 18 hours with the permission of a student services counselor. See fee

## **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 graduating with a cumulative grade point ratio of 3.5 or above 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 the Registrar's Office immediately.

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

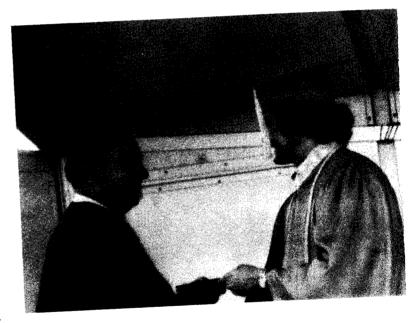
Requests for official transcripts must be in writing and addressed to the registrar.

#### 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

All fees are due and payable as part of your registration procedure on the days designated in the calendar. All students must come to the college on registration days with sufficient money to cover all fees and books. Students who do not pay fees on registration day or who do not make arrangements for fee payments through the business office will not be allowed to attend classes.

Tuition Full-Time Student Surcharge \$175.00 General Fee \$25.00 Tuition Part-Time Student Surcharge \$15.00 pe	Out of State \$175.00 25.00 \$25.00 er cr. hr. \$15.00 per cr. hr. 2.00
Credit by Examination \$20.00 pe	

TRANSCRIPT FEE — The college will produce one transcript upon written request from the student at no cost. Additional requests must be accompanied by a \$1 production fee.

ACTIVITY FEE — Full-time students will be assessed a \$5 activity fee each quarter. The purpose of this fee is to support Student Government, student publications, and student activities. No activity fees are assessed for Summer Quarter.

LATE FEE - A \$5 late registration fee will be assessed for all previously enrolled students registering after the announced regis-

APPLICATION FEE — A non-refundable \$10 application fee must accompany a student's application for admission.

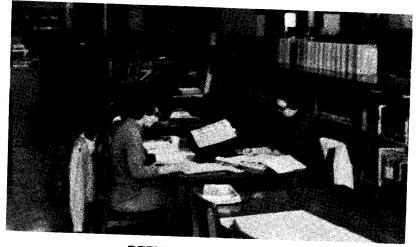
DEPOSIT FEE -- All Allied Health programs must pay \$100 deposit on tuition before the set deadline date or make other arrangements in the financial aids office. Refundable \$100 if not admitted into program. If admitted, the \$100 is deducted from first quarter's

CHANGE IN RATES — The College reserves the right to increase any published charges for tuition and fees should rising prices make such increases imperative.

## **SUMMER SESSION FEES**

The fees for each summer session will be as follows:

#### In State **Out of State** 1-5 hours (Part-Time) \$15.00 per atr. hr. \$16.00 per qtr. hr. 6 hours or more (Full-Time) \$100.00 \$112.50



## **REFUND POLICY**

Refunds for students withdrawing from school will be according to the following schedule:

Time of Summer Session	Withdrawal Regular Term	Refund
1-3 Class Days	1-5 Class Days	Full fees less \$10.00
4-6 Class Days	6-10 Class Days	75% of Instructional Fee
7-9 Class Days	11-15 Class Days	50% of Instructional Fee
10-12 Class Days	16-20 Class Days	25% of Instructional Fee

## 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 concert-type presentations by the performing vocal group, The Shawnee Singers. These performances feature both classical and popular music. The Singers frequently perform for civic organizations outside the college community. Two new groups have been added to the music department—a men's ensemble and a women's ensemble. All music groups are 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 vear.

#### **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.

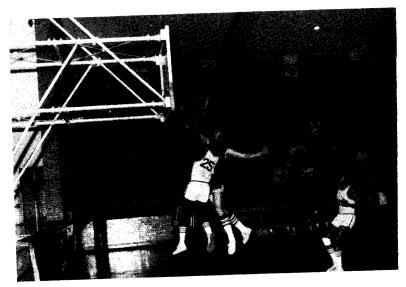
#### Interscholastic Athletics

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 1977.



#### 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 1975-76**

#### **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 personalsocial counseling are available to students without cost. Counseling services are available to the student upon request at the Student

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. Information from counseling sessions is not released without student consent.

## **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

## **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

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,

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 Parents' Confidential Statement (PCS) or a Student Financial Statement (SFS). 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 \$100.00.

College Work-Study: The College Work-Study Program is available to students who can demonstrate financial need through completion of the PCS or SFS 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.

## 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.

The nature of the programs offered at Shawnee State College **Placement Services** 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.

There are no dormitories or campus housing at Shawnee State. Housing 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

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

Adequate parking facilities are adjacent to the College. Students Parking 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.

The College operates a bookstore for student convenience. Book-**Bookstore** store 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.

Library services are available to serve the needs of students at Libraries 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.

I.D. cards will be issued to Shawnee State College students. An **Identification Cards** 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)

more advanced study at the receiving institution.

(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

#### 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

. 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, or C (Topics in English Language and Literature), and Speech 101 (Speech I) or Speech 102 (Speech II)
- B. Natural Sciences (12-15 qtr. 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, 140, 201-204)

- 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 (Antro. 201 and 250)
  - 2. (Humanities) (12-15 qtr. 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  1Science Modern Math (Math 120 & 121 — Elem. Topics in Math)  2Speech 101 or 102  Psy. 101, General English (Eng. 111, 112, 115, 140 A,B,C)  3Social Sciences (Electives) Physical Education  Total	4 8 8	Sophomore  3Social 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)  4Education 101 (Intro. to Ed.)	5 6 4 3 1 6 5
---	-------------	--	---------------------------------

 Three courses required — must include at least one course in Biology and one in Physical Science. (All courses must include lab). Total

- 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	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C)	8	•	
Payabalagy 101	•	Speech 101 or 102	3
Psychology 101	4	HPER 202 (Per. and Comm. Health)	4
Social Sciences (Core Requirements)	8	HPER 250 (Recreational Leadership)	3
Natural Sciences (Core Requirements — must include lab)	8	Art 201, 202 (Art for the Elem. School I, II)	6
Humanities (Core Requirements)	8	Math 120 or higher	-
Physical Education	1	Music 160, 161	3
Electives (Math 150, Psy. 131, Psy. 241)		Physical Educati	ь
	0	Physical Education	1
		Electives	17
Total	45		
		Total	45

## EDUCATION (BIOLOGY — GENERAL SCIENCE)

Freshman English (111, 112, 115, 140 A,B,C) Chemistry 141, 142, 143 Biology 111, 112, 113 *Math 201, 202 Physical Education  Total	15 15 8	Sophomore  Speech 101 or 102	12 12 12
		Total	48

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

## EDUCATION (CHEMISTRY — GENERAL SCIENCE)

English (111, 112, 115, 140 A,B,C)	12 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)	Hours 8	Sophomore Psychology 275	Hours 5
Natural Sciences/Math (Core Requirements — 1 science, 1 math recommended)	12	Speech 101 or 102	3 4 4
Social Sciences (Core Requirements — Psy. 101 required) Humanities (Core Requirements)	12 1	Speech 230 (Comm. Theory and Process)	4
Total	45	Speech 205-A (Debate) Physical Education English 201, 202, or 203 English 204, 205, or 206 English 225 or 226 Electives (English)	1 4 4 4
		Total	45

#### **COMMUNICATIONS — SPEECH EMPHASIS**

Freshman	Hours	Sophomore	Hours
English 111, 112, 115, 140 A,B,C	8	Psychology 275 (Educ. Psy.)	5
Speech 102 (Public Speaking)	3	Thar. 100 (intro. to Theater)	3
Natural Sciences/Math (At least 1 course in each)	12	Journalism 231 (News Reporting)	4
Social Sciences (Core Requirements — Psy. 101 required)	12	English 201, 202, or 203	4
Humanities (Core Requirements)	12	Physical Ed	2
Total	47		18
10.0.		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)	4
		Speech 205 — B, C (Intercollegiate Debate)	4
		Speech 215 (Group Discussion)	4
		Speech 220 or Thar. 220 (Oral Interp.)	4
		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) Speech 101 or 102 Sciences/Math (1 science and 1 math) Social Sciences (Core Requirements — Psy. 101 required) Humanities (Core Requirements) Physical Education Electives	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
Total	45	Total	

# EDUCATION — GENERAL SPEECH (SPEECH EMPHASIS)

Freshman Speech 101, 102 Speech 105 (Intro. to Mass Comm.) English (111, 112, 115, 140 A,B,C) Natural Sciences/Math (Core Requirements — at least 1 course in each) Psychology 101 Humanities (Core Requirements)	Hours 6 4 8 12 4	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)	Hours- 5 8 2 4 4 4
Total	46	Speech 110 (Listening) Speech 225 (Verbal Lang. Beh.) Speech 230 (Comm. Th. and Process) Electives (Thar. 215, Thar. 101)  Total	3 4 lin. 5

# 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)	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
riamamines (Gove rioquiromonie)		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**

Sophomore	Hours	Freshman	Hours
English (111, 112, 115, 140 A,B,C)	4	English (111, 112, 115, 140 A,B,C)	4
Psychology 275 (Educ. Psy.)	5	Speech (101, 102) one course	3
Comparative Arts and/or Philosophy	4	HPER 261 (Introduction to P.E. & Health)	2
Biology 290, 291 (Anatomy & Physiology I, II)	10	Psychology 101	4
HPER 202 (Personal and Community Health)	4	Sociology 101	4
HPER 110 (3 Activity Classes)	3	Biology 111	5
HPER 204 (Drugs, Alcohol and Tobacco)	3	Math (1 course)	4-5
HPER Electives	13	Comparative Arts and/or Philosophy	8
		HPER 227 (First Aid)	3
Total	46	HPER 234 (Laboratory Experience in Phys. Ed.)	2
		HPER 110 (3 Activity Classes)	3
		HPER 295 (Independent Study)	2
		Elective	2
		Total	46-47

# EDUCATION — PHYSICAL EDUCATION

Freshman English (111, 112, 115, 140 A,B,C). Speech (101, 102) one course HPER 261 (Introduction to P.E. & Health). Psychology 101 Social Science (Elective). Biology 111. Math (1 course). Comparative Arts and/or Philosophy. HPER 227 (First Aid). HPER 234 (Laboratory Experience in Phys. Ed.). HPER 110 (3 Activity Classes). HPER 295 (Independent Study). HPER 290 (The Art of Sport Officiating).	3 2 4 4 5	Sophomore  English (111, 112, 115, 140 A,B,C) Psychology 275 (Educ. Psy.) Comparative Arts and/or Philosophy Biology 290, 291 (Anatomy & Physiology I, II) HPER 202 (Personal and Community Health) HPER 110 (3 Activity Classes) HPER 250 (Recreation) HPER 204 (Drugs, Alcohol and Tobacco) HPER 209 Athletic Officiating Football 240 Athletic Officiating Basketball 241 Athletic Officiating Baseball (2 courses) 242 Athletic Officiating Track HPER 281 (Administration of Intramural Athletics)	Hours 4 5 4 10 4 3 3 6
		Total	46

# EDUCATION (PHYSICS — GENERAL SCIENCE)

Freshman English (111, 112, 115, 140 A,B,C) Chemistry 141, 142, 143  "Math 201, 202, 203 Humanities (Core Requirements) Social Sciences (Core Requirements — Psy. 101 required) Physical Education Speech 101 or 102	15	Sophomore Physics 201, 202, 203 Humanities (Core Requirements) Psychology 275 (Educ. Psy.) Social Sciences (Core Requirements) Electives (Sciences)	8 5
Total	48	*Math 130 sequence may be at a second	45
		*Math 130 sequence may be elected in preparation for calcul	lus.

# EDUCATION — SOCIAL STUDIES\*

Freshman  English (111, 112, 115, or 140 A,B,C)  Laboratory Sciences (two quarter sequence)  Mathematics  Humanities (Core Requirements)  History 101, 102, and 103  Psychology 101	4-5 12 12	Sophomore History 111, 112, and 113 Government 101 and 102. Economics 101 and 102. Geography 101 Psychology 275 (Educ. Psy.) Sociology 101 Anthropology 201 Speech 101 or 102 Physical Education Total	8 4 5 4 4 3
---	-----------------	--	----------------------------

\*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 English (111, 112, 115, 140, A,B,C) Natural Sciences (Core Requirements) Social Sciences (Core Requirements) Art 100 (Fundamentals of Vis. Art)	12 12 4	Sophomore  Speech 101 or 102	12
Comparative Arts (101, 102, 103)  Physical Education	9	Art 231, 232, 233 (Ceramics I, II, & III)	12
,		Art 271 (Life Drawing I)	Q
Total	46	Physical Education	1
		Electives	4
		Total	45

## PRE-COMMUNICATIONS (GENERAL) MAJOR

Freshman  English (111, 112, 115, 140 A,B,C)  Natural Sciences (Core Requirements)  Social Sciences (Core Requirements)  Humanities (Core Requirements)  Physical Education  Total	12 12 12	Sophomore  Speech 101 or 102	4 4 4
	46	Thar. 215 (Acting), or Sp. 220/Thar. 220 (Oral Interp.)	3 4 19
		Total	45

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.

#### **COMPARATIVE ARTS CONCENTRATION**

Freshman Speech I or Speech II	Hours 3	Sophomore Music (choose 15 hours)	Hours 15
English (111, 112, 115, 140, A,B,C)	8	Music 180 (College Choir) 2	
Natural Sciences (Core Requirements)	12	Music 120 (Music Literature) 2	
Social Sciences (Core Requirements)	12	Music 221 (Music of Baroque Period) 3	
Comparative Arts 101, 102, 103	9	Music 222 (Music of Classical & Romantic Period) 3	
Physical Education	2	Music 223 (Contemporary Music) 3	
		Music 175 (Men's Glee Club) 1	
Total	46	Music 176 (Women's Glee Club) 1	
		Music 170 (Voice) 1	
		Music 101 (Theory) 3	
		Theater (choose 15 hours)	15
		Thar. 101 (A, B, & C)	
		Thar. 215 (Principles of Acting)	
		Thar. 225 (Stage Costume & Make-Up)	
		Art (choose 15 hours)	15
		Art 101 (Studio Foundations)	
		Art 102 (Studio Foundations) 4	
		Art 102 (Studio Foundations)	
		Electives 3	
		Total	45

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

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

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

#### **PRE-JOURNALISM**

Freshman English (111, 112, 115, 140 A,B,C)		Sophomore  Speech 102 (Public Speaking)	12 4 4 1
Physical Education	 45	Electives (Social Sciences)	45

#### **PRE-THEATER MAJOR**

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140, A,B,C)	8	Speech 101 or 102	3
Natural Sciences (Core Requirements)	-	3 English Classes at 200 level or above	12
Social Sciences (Core Requirements)		Thar. 101 A, B, C	
Humanities (Core Requirements)		Thar. 225, Costume and Make-Up	3
Physical Education		Thar. or Inco 220	3
		Thar. 215	3
Total	45	Thar. 100	3
· <del></del>		Thar. 201	5
		Thar. 230	3
		Physical Education	1
		Total	45

### **CONCENTRATION AREAS**

#### Mathematics/Sciences

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

#### **PRE-BOTANY MAJOR**

Freshman English (111, 112, 115, 140 A,B,C) Speech 102 Chemistry 141, 142, 143 Biology 111, 112, 113 *Math 201, 202 Physical Education	3 15 15 8	Sophomore Chemistry 205, 206, 207 Biology 211 Biology 225 Biology 210 Social Sciences (Core Requirements) Humanities (Core Requirements)	5 5 5 12
Physical Education	 51	Humanities (Core Requirements)	51

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

### PRE-CHEMISTRY MAJOR

Freshman English (111, 112, 115, 140 A,B,C) Speech 102 Chemistry 141, 142, 143 *Math Calculus 201, 202, 203 Humanities Elective (Core Requirements) Social Science (Core Requirements)	8 3 15 12 4	Sophomore Chemistry 205, 206, 207 Physics 201, 202, 203 Humanities Elective (Core Requirements) Social Science (Core Requirements) Chemistry 225 Physical Education	12 8 8 4
Physical Education	1	Total	45
Total	47	*Math 130 sequence may be elected in preparation for calcu	ulus.

#### **PRE-DENTISTRY MAJOR**

Freshman	Hours	Sophomore	Hours
English (111, 112, 115, 140 A,B,C)	8	Chemistry 205, 206, 207	12
Speech 102 (Public Speaking)		Physics 201, 202, 203	12
Chemistry 141, 142, 143		Social Sciences (Core Requirements)	12
*Math 201, 202	8	Humanities Electives (Core Requirements)	12
Biology 111, 113	10		
Biology 225	5	Total	48
Physical Education	2	*Math 130 sequence may be elected in preparation for calcu	lus.
Total	51		

#### 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 in which you plan to transfer.

#### **PRE-FORESTRY MAJOR**

Freshman English (111, 112, 115, 140 A,B,C) Speech 102 Chemistry 141, 142, 143 *Math 201, 202 Biology 111, 112, 113 Physical Education	3 15 8 15	*Math 130 sequence may be elected in preparation for calculus.  Sophomore  See counselor for additional information regarding the Forestry School of Transfer.
Total	51	

### PRE-MEDICAL TECHNOLOGY MAJOR

Freshman	Hours	Sophomore	Hours
Chemistry 141, 142, 143	15	Chemistry 205, 206, 207	12
*Math 201, 202	8	Chemistry 225	
Speech 102		General Genetics (Biology 225)	
Biology 111, 113		Social Science (Core Requirements)	
English (111, 112, 115, 140 A,B,C)		Humanities Elective (Core Requirements)	
Physical Education		· · · · · · · · · · · · · · · · · · ·	
		Total	45
Total	46	*Math 130 sequence may be elected in preparation for calcu	ılus.

### PRE-MEDICINE MAJOR

Freshman English (111, 112, 115, 140 A,B,C)	15 10	Sophomore Chemistry 205, 206, 207 Zoology 225 Physics 201, 202, 203 Social Sciences (Core Requirements) Humanities Electives (Core Requirements)	5
*Math 201, 202 Social Sciences (Core Requirements)	4	Total	49
Physical Education	50	*Math 130 sequence may be elected in preparation for calcu	ılus.

# PRE-MICROBIOLOGY or PUBLIC HEALTH & SANITATION MAJOR

Freshman English (111, 112, 115, 140 A,B,C) Speech 102 Chemistry 141, 142, 143 Biology 111, 112, 113 *Math 201	15 15	Sophomore Chemistry 205, 206, 207 Physics 201, 202, 203 Social Sciences (Core Requirements) Humanities Elective (Core Requirements) Physical Education	Hours 12 12 12 12 12 2
*Math 201 Biology 225	5	Total	50
Total	50	*Math 130 sequence may be elected in preparation for calcu	ılus.

### PRE-OPTOMETRY MAJOR

Freshman English (111, 112, 115, 140 A,B,C) Speech 102 Chemistry 141, 142, 143 Biology 111, 113 "Math 201, 202 Psychology 101 Physical Education	3 15 10 8	Sophomore Chemistry 205, 206, 207 Physics 201, 202, 203 Social Sciences (Core Requirements) Humanities Electives (Core Requirements)  Total	12 12 12 
Total	50	*Math 130 sequence may be elected in preparation for calcul	lus.

### PRE-PHARMACY MAJOR

3 15 10	Social Sciences (Core Requirements)  Physical Education	12 8
48	Total	46
	8 3 15 10 8 4	8 Chemistry 205, 206, 207 3 Physics 201, 202, 203 15 Social Sciences (Core Requirements) 10 Physical Education 8 Humanities (Core Requirements)

### PRE-PHYSICAL THERAPY MAJOR

Freshman English (111, 112, 115, 140 A,B,C) Chemistry 121, 122 Biology 111, 113 Biology 225 Physical Education 202 Psychology 173 Math 150 or Psychology 131  Total	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	4 8 5 5
10.0		iotai	49

## PRE-VETERINARY MAJOR

Freshman English (111, 112, 115, 140 A,B,C) Speech 102 *Math 201, 202 Chemistry 141, 142, 143 Biology 111, 113 Zoology 225 Physical Education	8 15 10 5	Sophomore Chemistry 205, 206, 207 Physics 201, 202, 203 Social Sciences (Core Requirements) Humanities Elective (Core Requirements)  Total *Math 130 sequence may be elected in preparation for calculations.	Hours 12 12 12 12 12 48 alus.
Total	51		

### PRE-ZOOLOGY MAJOR

Freshman	Hours
English (111, 112, 115, 140 A,B,C)	110416
Onemistry 141, 142, 143	3 15
Biology 171, 112, 113	15
Watt 201, 202	8
Physical Education	2
Total	51

Sophomore	
Chemistry 205, 206, 207	Hours
Social Colonices (Cole Reguliramental	12
-iology 225 - deliencs	12
Humanities Elective (Core Requirements)	5
(Solo Hoquienents)	12
Total	53
*Math 120 comments	

\*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 English (111, 112, 115, 140 A,B,C) 'Social Sciences  *Math 201, 202 Economics 101, 102 Natural Sciences (Core Requirements) Physical Education  Total	8 8 8 12	Sophomore  Humanities (Core Requirements)  Social Sciences  Business Law 250  Accounting 101, 102  Speech 102 (Public Speaking)  QM 200, 201 (Quantitative Methods)  Electives	4 4 8 3
		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 English (111, 112, 115, 140 A,B,C) Natural Science (Core Requirements) Physical Education Language 111, 112, 113 Government 101, 102 Philosophy (102 or 103)  Total	8 12 2 12* 8 4	Sophomore  Speech 102 (Public Speaking)	12
*Dependent upon previous language experience and college to		Language 212, 213, 211	12* 4
which the student transfers (See explanation in History Se	ection).	Total	46

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

Freshman  English (111, 112, 115, or 140 A,B,C)  Philosophy 101 (Fundamentals)  History 101, 102, 103 (Western Civilization)  Foreign Language  Natural Science (2 courses in the same area)  Physical Education	8 4 12 12* 8 2	Sophomore  Speech 102 (Public Speaking)  History 111, 112, 113 (United States)  Philosophy 102 (Logic)  Foreign Language (completion of requirements)  Humanities  Natural Science  History Electives	3 12 4 0-12* 4 4 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) Philosophy 102 (Logic), 103 (Moral) Language 111, 112, 113 Lab Science (2 quarter sequence) Government 101, 102 Speech 102 (Public Speaking)	8 8 12* 8 8 3	Sophomore History 111, 112, 113	12 8 4 12* 4 2 3
Total	47	Total	45

\*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) 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 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
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

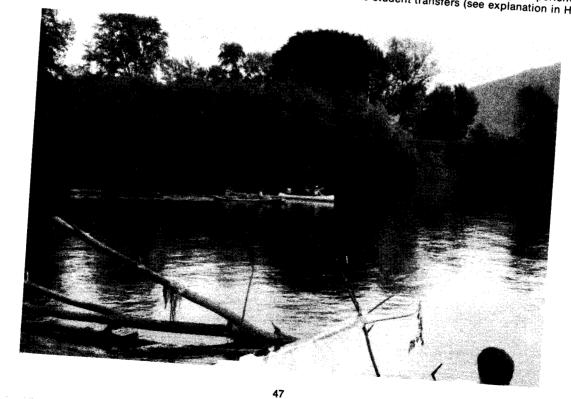
Freshman  English (111, 112, 115, 140 A,B,C) Psychology 101 (General Psychology) Psychology 173 (Child and Adolescent) Sociology 101 (Principles of Sociology) Natural Sciences (Core Requirements — Biology 111, 120 recommended) Government (101 or 102) Philosophy 102 (Moral Philosophy) Physical Education Electives	8 4 4 4 4 12 4 4 2 4	Sophomore  Speech 102 (Public Speaking)  Math 200 (Elem. Stat. for Soc. & Behav. Science)  Economics 101, 102  Anthropology 201  Sociology 202 (Intro. to Family Sociology)  Government 201 (Urban Politics) or  205 (Appalachian Politics)  Humanities (Core Requirements)  Electives (Social Sciences)	4 8 4 4
Total	46	Total	45

<sup>\*</sup>Language Requirement dependent upon school to which student transfers.

# PRE-SOCIOLOGY MAJOR

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

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



# ACADEMIC COURSE DESCRIPTIONS

### ANTHROPOLOGY

# Anth 0201 — Introduction to Anthropology (5)

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

### Anth 0250 — Ethnology (4)

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)

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)

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

# Arts 0102 — Studio Foundations II (4)

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)

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)

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)

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

### Arts 0222 — Painting II (4)

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

### Arts 0223 — Painting III (4)

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)

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)

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)

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 (4)

This course will provide a working survey of various printmaking techniques. Perhaps intaglio, lithography, silkscreen, relief printings (to be determined by availability of equipment and personnel).

# Arts 0251 — Graphic Design - Typography (4)

Prereq. 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)

Prereq. Art 101, 102, 103.

Pictorial imagery as a design tool. Problems in product, poster,

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

Prereq. 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

### 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)

Prereq. Art 101.

Drawing the human figure in various media.

### Arts 0272 - Life Drawing II (4)

Prereq. Art 271.

A continuation of Art 271.

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

Prereq. Art 272.

A continuation of Art 272.

### **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.

# 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)

Prereq. 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 (5)

Prereq. 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. 3 labs.

# Biol 0120 — 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 0121 — Biology, Plants and Man (4)

Prereq. 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. 3 lec. 2 lab.

# Biol 0210 — Trees and Shrubs (5)

Prereq. 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)

Prereq. Biol 112.

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

### Biol 0215 — Ecology (5)

Prereq. Biol 112.

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)

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

### Biol 0235 — Microbiology I (5)

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 lec. 4 labs.

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

Morphological and physiological aspects of cells and tissues and of the dermal, skeletal, muscular, circulatory, and respiratory systems of the human body. ¾ lec. 3 labs.

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

Continuation of Biol 290. Morphological and physiological aspects of the digestive, urinary, reproductive, endocrine, and neurosensory systems. ¾ lec. 3 labs.

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

Prereq. 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 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)

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)

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)

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. algbra 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.

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 chemi-

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

Prereq. 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.

# Chem. 0205 — Organic Chemistry (4)

Prereq 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)

Prereq. 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 0225 — Instrumental Methods of Analysis (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.

### 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

# 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.

#### **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.

#### **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

### ENGINEERING DRAWING

For course descriptions of Engineering Drawing, EnDr 0101, EnDr 0102, and EnDr 0103, please refer to the CIVIL ENGINEERING

For the course description of Electro-Mechanical Drawing, EMng 0103, refer to the ELECTRO-MECHANICAL Engineering technology on page 117.

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

English 0101, English 0111, and English 0112, or English 0111, English 0112, and English 0115.

Students who have completed three years of high school English with grades averaging less than a "C" (2.00) should follow the English 0101, 0111, and 0112 sequence.

Students who have completed four years of high school English with grades averaging "C" (2.00) or better should follow the English 0111, 0112, and 0115 sequence.

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, and 140C.

Either Speech 0101 or Speech 0102 is also required.

# Engl 0101 — Fundamentals of Composition (4)

This course is to help the student develop or improve study skills needed to succeed in college. It should assist the student in adjusting to college work, developing methods of improving his vocabulary, his reading, and his listening skills. The student should be able to apply the skills learned in this course to his other college courses. 4 lec. 1 lab.

# Engl 0111 — Contemporary Writing Skills I (4)

A study of the fundamental principles for writing clear, concise prose. This course assists the student in understanding the rhetorical devices which contribute to good writing. It also introduces the student to the fundamentals of logic. 4 lec. 1 lab.

# Engl 0112 — Contemporary Writing Skills II (4)

Contemporary Writing Skills II continues a study of fundamental principles and basic skills for writing clearly and effectively. Logic in writing, a relationship between idea, purpose, and form, and polishing and revising the writing are emphasized. Fundamentals of writing the research paper are covered in this course. 4 lec. 1 lab.

# Engi 0115 — Composition and Mass Communications (4)

This course will cover the nature and function of all forms of mass communication - press, television, radio, film, and the related fields of advertising and public relations. The writing assignments are structured to help the student in judging with valid critical standards the performances of the media. 4 lec. 1 lab.

### Engl 0121 — Technical Writing (3)

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

# Engl 0201 — Introduction to Fiction (4)

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

## Engl 0202 — Introduction to Poetry (4)

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

## Engi 0203 — Introduction to Drama (4)

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

# Engl 0204 — Comparative Literature I (4)

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)

Prereq. 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.

#### **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)

Prereq. 111.

Continuation of 111. Basic text, workbook and readings used. Lab required.

### Fren 0113 — Elementary French (4)

Prereq. 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)

Prereq. 113 or instructor's approval.

Continued intensive review of grammar is given. Sight translation is stressed. Conversational drills include advanced idiomatic expressions.

## Fren 0213 — Intermediate French III (4)

Prereq. 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 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

### Geol 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.

Archery 110-A

Badminton 110-B

Basketball 110-C

Bowling 110-D

Conditioning & Weight Training 110-E

Beginning Golf 110-F

Intermediate Golf 110-G

Judo 1.10-H

Karate 110-l

Beginning Swimming 110-J

Intermediate Swimming 110-K

Live Saving & Water Safety 110-L

Beginning Tennis 110-M

Intermediate Tennis 110-N

Volleyball 110-0

Cycling 110-Q

Modern Dance 110-R

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,

# 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

### 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 require-

### HPER 0234 — Laboratory Experience in Physical Education (2) Prereq. P.E. Majors.

Observation and research in physical education at the elementary

# 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 - Basebali (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

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

# HPER 0261 — Introduction to Physical Education and Health (2)

Prereq. P.E. Majors/Minors.

Lectures, discussion, and visual aids pertaining to scope and content of a professional physical educator.

# HPER 0270 — Physical Eduction 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)

Prereq. 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: Renaissance to 1648 (4)

Renaissance; Reformation; origins of national state system; diplomacy and imperialism as applied to Portugal, Spain, and Hapsburg Empires;

# 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)

Prereq. American History or Instructor's permission.

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)

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)

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)

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 0101 — Basic Math I (4)

Fundamentals of arithmetic and algebra, with emphasis on manipulative skills; basic operations on integers and rational numbers; work with algebraic expressions, solution of simple equations, graphic, factoring, etc.

### 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.

### 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 I (4)

Systems of numerations; concepts of logic; basic algebra; solving equations and inequalities; business applications; introduction to programming (desk calculator).

#### Math 0112 — Data Math II (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 Math I. Review topics in high school algebra including linear and quadratic equations and inequalities, factoring, fractions, radicals and exponents and simple graphing techniques; (simultaneous equations); use of the slide rule; trigonometry of the right triangle.

### Math 0131 — College Algebra il (4)

Prereq. Mastery of Algebra I or equivalent.

Binomial theorem; complex numbers; simultaneous quadratic equations; curve sketching; arithmetic and geometric progressions; theory of logarithms; computation with common logarithms exponential functions.

### Math 0132 — Trigonometry and Analytic Geometry (4)

Prereq. Mastery of Algebra II or h.s. equivalent.
Circular functions; analytic trigonometry; coordinate geometry of the straight line and the conic sections: vectors

# 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 (4)

Prereq. 4 hrs. of h.s. math (including Trig.) or Algebra I, Algebra II, Trig/Analy Geom. III. Functions and graphs; simple sequences; limits; differentiation of algebraic and trigonometric functions; maxima and minima; anti-derivatives.

#### Math 0202 — Calculus II (4)

Integral as an area; fundamental theorem of integral calculus; techniques of integration; application of the definite integral; logarithmic and exponential functions.

### Math 0203 — Calculus III (4)

Prereq. Calculus II.

Hyperbolic functions; exponential growth and decline; sequences and series; taylor polynomials; power series; L'Hospital's rule; improper integrals; polar coordinates.

#### Math 0204 — Calculus IV (4)

Prereq. Calculus III.

Vectors and vector functions; extrema of functions of two variables; partial derivatives; gradients; double and triple integrals.

#### 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)

Prereq. 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)

Prereq. 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)

Prereq. 120 or permission.

Study of selected works of 20th Century, both traditional and electronic, through readings, scores, tapes, and recordings.

### Musi 0160 — Basic 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)

Prereq. Music Fund. with minimum grade of C.

Methods of teaching elementary music, with emphasis on singing, playing instruments, and rhythmic body movement.

### Musi 0170 — Class Voice (3 qtrs. 1 cr. hr. per qtr.)

Prereq. non-voice majors.

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)

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)

Survey of musical literature from 1750 to 1900. Emphasis on elements Prereq. 0221. 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.

#### 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)

Prereq. 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.

#### **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.

### Phys 0203 — Physics (Heat, Light, Sound) (4)

Fundamental properties and basic principles of heat, light and sound.

### Phys 0201 — Physics (Mechanics) (4)

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)

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.

#### **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)

Prereg. Psyc 0101.

A consideration of conflicts and problems of adjustment in modern society.

## Psyc 0173 — Human Growth and Development (4)

Prereq. Psyc 0101.

A study of the factors affecting human growth and development through the life cycle.

### Psyc 0226 — Experimental Psychology (5)

Prereq. 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)

Prereq. Psyc 0101 and Math 0221.

Applications of psychology in business and industry.

### Psvc 0270 — Abnormal Psvchology (5)

Behavior disorders, their cause and effects on person, family and society.

### Payc 0132 — Human Behavior

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.

### Paye 0275 — Educational Psychology (5)

Psychological foundations of education, with emphasis upon learning, transfer, motivation, and evaluation.

## Psyc 0290 — Independent Study in Psychology (1-3)

Prerea. 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)

Theoretical distributions, sampling, estimation (point and interval), hypothesis testing, simple regression and correlation.

### REAL ESTATE COURSES

## BaFT 0210 — Real Estate Principles and Practices I (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 Principles and Practices II (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

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

The three basic techniques of appraising . . . 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.

#### 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.

#### 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 examine problems in selected areas of interest, i.e., education, housing,

# SoSc 0299 — Interdisciplinary Special Topics in the Social Sciences (4)

Course will draw upon the various disciplines in the social sciences.

#### SOCIOLOGY

### Soci 0101 — Principles of Sociology (4)

Nature of human society and factors affecting its development. Fundamental concepts of sociology: culture, collective behavior, personality,

### Soci 0201 — Current Social Problems (4)

Prereq. 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 juvenile 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)

Prereq. 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)

Prerea. 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)

Prereg. 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)

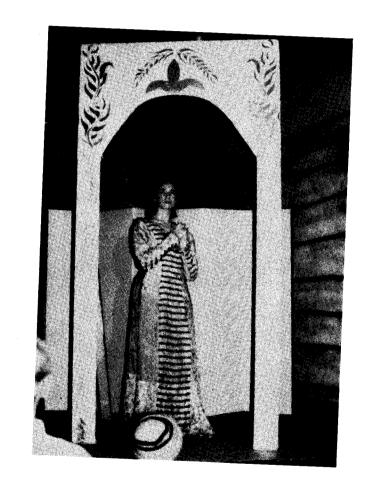
Techniques in oral interpretation and development of intellectual and emotional responsiveness to meaning of literature.

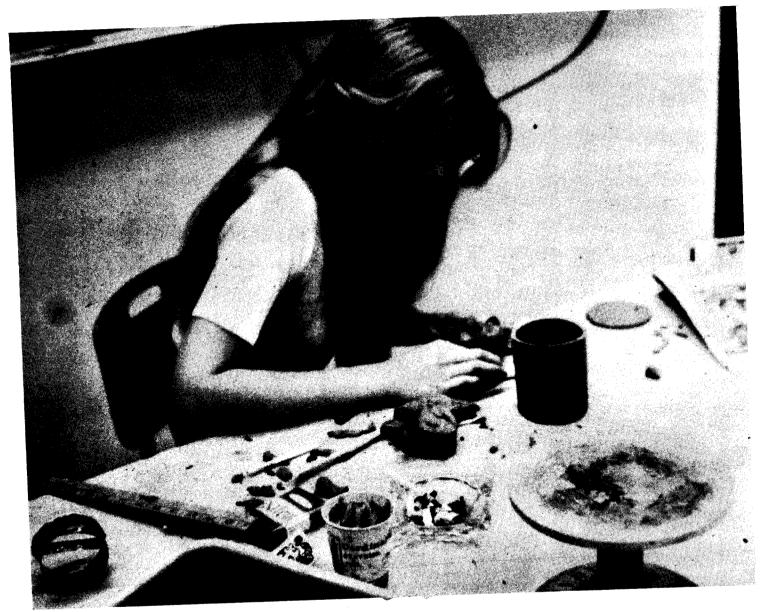
## Thar 0225 — Stage Costume and Make-up (3)

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.





# 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.

### **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, 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.

#### 091 — 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.

#### 093 — 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.

#### 092 — 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.

#### 094 — 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.

#### 095 — 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.

Developmental courses not applicable toward an associate degree.

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  $5\ \text{wks.}$ )

#### 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.)

# 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.

### **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 60 for the Real Estate Courses and their course description offered at Shawnee State.

## **BUSINESS TECHNOLOGIES**

(ASSOCIATE OF APPLIED BUSINESS DEGREE)

Accounting
Banking & Finance
Data Processing and Computer Programming
Executive Secretarial
Retail Mid-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 recordkeeping 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.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.		Cr. Hrs.
	FIRST QUARTER						FOURTH QUARTER				
Engl 0101	Fund, of Composition	G	5	0	4	Soci 0101	Principles of Sociology	G	5	0	4
ExST 0101	Typing I	Ť	2	4	3	BusL 0250	Business Law I	В	4	0	3
ExST 0120	Business Machines	Ť	2 2	3	3	Acct 0211	Inter. Accounting I	T ·	3	4	4
Acct 0101	Accounting I	В	. 3	4	4	Psyc 0101	Principles of Psychology	G	5 3	0	4
Math 0105	Business Math	В	5	Ó	4	Acct 0242	<b>Business Communications</b>	G	3	2	3
					_						
			17	11	18				20	6	18
	SECOND QUARTER						FIFTH QUARTER				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Econ 0101	Principles of Economics I	В	5	0	4
EDPT 0101	Intro. to Data Processing	G T	3	2	3	Spch 0101	Speech	Ğ	3	Ŏ	3
Math 0101	Basic Mathematics	B	5	ō	4	Acct 0212	Inter. Accounting II	Ť	3 3	4	4
RMMT 0301	Prin. of Management	Ř	4	0	4	Acct 0221	Cost Accounting I	Ť	3	3	4
Acct 0102	Accounting II	B B	3	4	4	Acct 0205	Principles of Finance	Т	3	Ŏ	3
71001 0102	Accounting in	_	_	_	_				_		_
			20	6	19				17	7	18
	THIRD QUARTER						SIXTH QUARTER				
Engl 0112	Contemp. Writing Skills II	G	5	0	4	RMMT 0302	Personnel Management	Т	3	0	3
Acct 0103	Accounting III	Ť	5 3	4	4	Econ 0102	Principles of Economics II	В	5	0	4
EDPT 0103	Computer Fund. & Proc.	Ť	2	4	3	Acct 0241	Auditing	T	2	4	3
Acct 0104	Tax Accounting	Ť	3	3	4	Acct 0222	Cost Accounting II	Т	2 3	3	4
RMMT 0101	_	В	4	ŏ	3	Acct 0213	Inter. Accounting III	Т	3	3	4
111111111111111111111111111111111111111	mino. to Edomodo			_	_			•	_		
			17	11	18				16	10	18

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

### **ACCOUNTING COURSE DESCRIPTIONS**

#### Acct 0101 - Accounting I

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

Prereg. 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

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 0205 — Principles of Finance

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

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

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

Prereg. Acct 0212.

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

Prereq. 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

Prereg. 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 0104 - Tax Accounting

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 0241 --- Auditing

Prereg. 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

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

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.

# 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. BANKING AND FINANCE CURRICULUM

### 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.

111011 1401 911	• • •	DA				ANCE CORP	Course		01	1	<b>C</b> -
Course No.	Course	Code	Class Hrs.	Lab Hrs.	er. Hrs.	Course No.	FOURTH QUARTER	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER					Engl 0121	Technical Writing I	G	5	0	4
Cmal 0101	Fund. of Composition	G	5	0	4	Econ 0101	Economics I	В	5	0	4
Engl 0101 Math 0105	Business Math	B	5	ŏ	4	Psyc 0132	Human Behavior	В	3	0	3
BusL 0250	Business Law I	В	5		4	BaFT 0201	Residential Appraising	Т	2	3	3
BaFT 0101	Prin. of Banking & Finance		3	0 2 3	3	BaFT 0202	Home Mortgage Lending	T	. 3	3	4
Acct 0101	Accounting I	В	2	3	3				_		
ACCIOIOI	7.000ammg 1	_			_				18	6	18
			20	5	18		FIFTH QUARTER				
	SECOND QUARTER					Psyc 0101	Principles of Psychology	G	5	0	4.
EL0111	Contemp. Writing Skills I	G	5	0	4	Spch 0101	Speech I	G	3 5 2 5	0 0 3 0	3
Engl 0111 Acct 0102	Accounting II	B	2	3	3	Econ 0102	Economics II	В	5	0	4
BusL 0260	Business Law II	В	5	ō	4	BaFT 0203	Valuation of Real Estate	Т	2	3	3
RMMT 0227		Ŧ	5 2 5 5 2	0 0 3	4	BaFT 0204	Investments I	Т	5	0	4
BaFT 0102	Prin. of Banking & Finance I	T	2	3	3				_		_
Bai 1 0102			_	_					20	3	18
			19	6	18		SIXTH QUARTER				
	THIRD QUARTER					Soci 0101	Principles of Sociology	G	5	Ö	4
Engl 0112	Contemp. Writing Skills II	G	5	0	4	BaFT 0205	Personnel Management	Т	3	0 0 0	3
BaFT 0103	Fund. of Data Processing	Ť		0 3 3 0	3	BaFT 0206	Investments II	Т	5	0	4
Acct 0103	Accounting III	Ť	2 2 2	3	3	BaFT 0207	Mortgage Loan Servicing	Т	2	3	3
BaFT 0104	Insurance I	Т	2	0	2	BaFT 0208	Supv. of Personnel Admin.	T	3	0	3
BaFT 0105	Installment Credit	Т	4	0	3	BaFT 0209	Seminar in Consumer	_	_		
BaFT 0106	Prin. of Bank Operations	Т	2	3	3		Finance	Т	0	4	1
			<del>_</del>	9	<del></del> 18				18	7	18
	CUMMED CHARTER		"	•		Studente m	nay elect a different sequen	ce of F	nalish v	with a	dvisor
	SUMMER QUARTER	-			•	approval.	lay elect a different sequent				
BaFT 0111	Banking & Finance Intern.	Ţ			6	appiovai.					
BaFT 0112	Spec. Prob. Banking & Fin.	Ŧ			2						
					0						

## COURSE DESCRIPTIONS BANKING AND FINANCE

### BaFT 0101 -- Principles of Banking and Finance I

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

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

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

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

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

### BaFT 0106 -- Principles of Bank Operations

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

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

Weekly evaluation report.

### BaFT 0201 - Residential Appraising

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

A course covering the basic principles of home mortgage lending. A study of the procedures used 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

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

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

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

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

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

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

#### Baft 0209 — Seminar in Consumer Finance

Problem to be selected in consultation with an assigned instructor.

# 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.

	Course Code Hrs. Hrs. No. Course Code Hrs. Hrs. Hrs.														
Course No.	Course	Code					Course	Code							
140.	000.00						FOURTH QUARTER								
	FIRST QUARTER					Engl 0121	Technical Writing I	G	3	0	3				
Engl 0101	Fund. of Composition	G	5	0	4	Soci 0101	Principles of Sociology	G	5	0	4				
Acct 0101	Accounting I	В	3 5	2 0 0 5	3	BusL 0250	Business Law I	В	4	0	3				
Math 0111	Data Math I	В		0	4	EDPT 0241	Systems Acct., Data				_				
<b>RMMT 0101</b>	Intro. to Business	В	4	0	3		Processing Applications	T	3	2 6	3				
<b>EDPT 0101</b>	Intro. to Data Processing	Т	3	5	4	EDPT 0221	Systems Program. & Lab I	Т	3	6	5				
				7	18				18	8	18				
			20	′	18		CIETU ALLA DECD		10	0	10				
							FIFTH QUARTER								
	·					EDPT 0231	Systems Analysis	<u> </u>	. 3	3	4				
	SECOND QUARTER					EDPT 0222	Systems Program. & Lab II	Ţ	3	9	6 4				
Engl 0111	Contemp. Writing Skills I	G	5	0	4	RMMT 0301		B B	. 4 5	3 9 0	4				
Acct 0102	Accounting II	В	3 5 3	2 0 5 0	3	Econ 0101	Prin. of Economics I	ь	5	0	_				
Math 0112	Data Math II	В	5	0	4				15	12	18				
EDPT 0111	Computer Fundamentals I	Ţ		5	4		OIVTH OHABTED		13	12	.0				
Spch 0101	Speech I	G	3	U	3		SIXTH QUARTER		_	_					
			40	7	40	Spch 0102	Speech II	G	3	0 6	3				
			19	/	18	EDPT 0223	Advanced Programming	Ţ	3 5	0	5				
						Psyc 0101	Principles of Psychology	G	5	U	4				
						EDPT 0251	Case Study-Complete	т	3	6	5				
	THIRD QUARTER						Systems	,	_	_	_				
Engl 0112	Contemp. Writing Skills II	G	5 3	0	4				14	12	17				
Acct 0251	Systems Accounting	T	3	2	3	*Chudomto	who are planning to continu	a thair							
Math 0106	Business Statistics	В	4	0	4	Students	gree should have three addi	tional M	lath clas	202	. Data				
EDPT 0112	Computer Fundamentals II	Ţ	3 2	0 2 0 5 3	4	tour-year de	culus I, and Calculus II.	lional IV	ialli vias		Ju.u.				
EDPT 0102	Basic Computer Concepts	T	2	3	3		•	<b>-</b>	liab v	uith oc	duisor				
			_		_	Students	may elect a different sequer	ice of E	ingusn v	vitii ac	141201				

approval.

17

10 18

# DATA PROCESSING AND COMPUTER TECHNOLOGY COURSE DESCRIPTIONS

### EDPT 0101 - Introduction to Data Processing

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 0111 — Computer Fundamentals I

Prereg. 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

Prereg. DP 301, DP 302.

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

#### **EDPT 0102 — Basic Computer Concepts**

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 0221 — Systems Programming and Lab I

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

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

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

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

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

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.

# EDPT 0101 — Introduction to Data Processing (For Non DP Majors)

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 0102 — Computer Fundamentals and Procedures (For Non DP Majors)

Prereg. 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.

### Acct 0251 — Systems Accounting

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.

# **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 0101	Fund. of Composition	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	Ğ	3	ŏ	š
Acct 0101	Acct I	В	3	4	4	ExST 0242	Secretarial Practices II	Т	3	2	3
ExST 0101	Typing I	<u>T</u>	2	3 2	3	Soci 0101	Sociology	G	5	2 0	4
ExST 0111	Shorthand I	Т	3	2	3	Psyc 0101	Prin. of Psychology	В	5	0	4
			18	9	<u> </u>	ExST 0215	Adv. Shorthand Speed				
			10	9	18		Building	Т	0	5	1
	SECOND QUARTER								 21	7	— 19
Engl 0111	Contemp. Writing Skills I	G	5	0	4				21	,	19
ExST 0120	Business Machines I	T	2	3	3		SIXTH QUARTER				
Acct 0102	Accounting II	В	3	4	4	Econ 0102	Prin. of Economics II	В	5	0	4
ExST 0102	Typing II	T	2	3	3		Personnel Management	Ť	3	ő	3
ExST 0112	Shorthand II	T	3	2	3		· · · · · · · · · · · · · · · · · · ·	•	J	·	J
				_	_	*BLOCK PRO	OGRAM — CLASSROOM				
			15	12	17	ExST 0243	Secretarial Practices III	Т	0	15	5
	THIRD QUARTER					ExST 0216	Expert Shorthand	Ť	3	2	3
F==1.0440		_	_	_		ExST 0223	Expert Transcription	Т	3	2 2	3
Engl 0112 ExST 0121	Contemp. Writing Skills II Business Machines II	G	5	0	4				_	_	_
ExST 0221	Dictation & Transcription I	T T	2 3	3	3 3				14	19	18
ExST 0103	Typing III	÷	2	3 2 3 2 0	3	1DI 00K DD					
ExST 0113	Shorthand III	Ť	3	2	3		OGRAM — ON THE JOB				
ExST 0231	Records Management	÷	3	ō	3	ExST 0244	Secretarial Internship	Ţ	0	15	3
	· · · · · · · · · · · · · · · · · · ·	·	_	_	_	ExST 0216	Expert Shorthand	T	0	5 5	2
			18	10	19	ExST 0223	Expert Transcription	T	0	5	2
	FOURTH QUARTER								_	25	7
RMMT 0101	Intro. to Business	В	4	0	3	+		_			
BusL 0250	Business Law I	В	4		3		ent may take either Sec 243	or Sec	244, but	his ch	oice
EDPT 0101	Intro. to Data Processing	Ť		2	3		roved by his advisor.				
ExST 0222	Dict. & Transc. II	Ť	3 3	2	3	Students r	may elect a different seque	nce of E	nglish w	ith ad	/isor
ExST 0214	Shorthand IV	T	3	2	3	approval.					
ExST 0241	Secretarial Practices I	Ť	3	0 2 2 2 2	3						
				_	_						
			20	8	18						

# EXECUTIVE SECRETARIAL COURSE DESCRIPTIONS

### ExST 0101 - Typing I

A proficiency test is given to all students who have had previous training in typing to determine their level of competency. Each student is placed at his individual skill level as determined by the test. Materials and assignments are given to students on an individual basis to encourage the building of speed and accuracy and solving of problems at increasingly more difficult levels. The student who has had no previous instruction in typing begins a study of the touch system with emphasis on speed and accuracy.

### ExST 0102 - Typing II

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

### ExST 0103 - Typing III

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

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. Students who have had previous instruction in shorthand will continue with their study of theory, word families, brief forms, and phrases. Students' individual speed levels are determined and each student will be encouraged to raise his speed and accuracy level.

### ExST 0112 - Shorthand II

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

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

### ExST 0214 - Shorthand IV

Prereq. Shorthand I, II, III.

A systematic development of business vocabulary to prepare the student for work as either a medical secretary, a legal secretary, or a business/industrial secretary. Development of high speed in these areas through the use of shortcuts and high frequency brief forms and derivatives. The student will have a choice of his area of specialization.

### ExST 0215 --- Advanced Shorthand Speedbuilding

Prereg. Shorthand I, II, III.

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 in his specialized area with emphasis on individual speed development.

### ExST 0216 -- Expert Shortband

Prereq. ExST 0215.

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

Prereq. ExST 0101, 0102, 0111, 0112.

A supplemental course to Shorthand III emphasizing practice in taking dictation and transcribing at various rates of speed for mailable copy.

### ExST 0222 -- Dictation and Transcription II

Prereg. ExST 0221.

A supplemental course to Shorthand IV emphasizing practice in taking dictation and transcribing at various rates of speed for mailable copy in the student's specialized area of study. Office-style dictation procedures and techniques and machine transcription will be emphasized.

### ExST 0223 — Expert Transcription

Prereg. ExST 0222.

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

### ExST 0231 - Records Management

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

Prereq. ExST 0101, 0102, 0103, 0231, 0120, 0121.

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

Prereq. ExST 0241.

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

Prereq. ExST 0242.

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 Internship

The secretarial internship will be completed as actual work experience in a local business, industrial, or professional office.

### ExST 0120 — Business Machines I

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)

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

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



# **RETAIL MID-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 multiunit 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 MID-MANAGEMENT CURRICULUM

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	
	FIRST QUARTER						FIFTH QUARTER				
Engl 0101	Fund. of Composition	G	5	0	4	Soci 0101	Prin. of Sociology	0	_	_	
Math 0105	Business Math	В	5	Ō	4	RMMT 0225		G T	5	0	4
Acct 0101	Accounting I	В	3	4	4	Engl 0121	Technical Writing !	Ġ	3	2	3
RMMT 0101		Т	4	0	3	BusL 0250	Business Law I	В	5 4	0	4
EDPT 0101	Intro. to Data Processing	T	2	4	3	RMMT 0233		Ť	3	0	3 3
			19	8	18				 20	<del>-</del>	17
	SECOND QUARTER						SIXTH QUARTER			•	••
Engl 0111	Contemp. Writing Skills I	G	5	0	4	Psyc 0101		_			
RMMT 0102		Ť	5 5 3 3	ŏ	4	BusL 0260	Prin. of Psychology	G	5	0	4
Acct 0102	Accounting II	Ť	3	4	4	RMMT 0227	Business Law II Credit and Collection	В	4	0	3
Spch 0101	Speech I	G	3	Ö	3	RMMT 0301		T	4 5 4	0	4
Econ 0101	Prin. of Economics I	B	5	ŏ	4	Spch 0102	Speech II	T G	4 3	0 0 0	4
			_			-,	<b>Opoco</b>	G	. 3	U	3
			21	4	19				21	0	18
	THIRD QUARTER						SEVENTH QUARTER				
RMMT 0240	Retail Accounting	Т	2	3	3	Math 0106	Business Statistics	В		_	_
Engl 0112	Contemp. Writing Skills II	G	5 5	ŏ	4	RMMT 0302		B T	4 3	0	4
Econ 0102	Prin. of Economics II	В	5	0	4	RMMT 0223	Retail Buying	Ť	4	0 0	3
RMMT 0103	Intro. to Retailing	Т	5	0	4	Psyc 0132	Human Behavior	Ġ	3	0	4
RMMT 0104	Salesmanship	T	3	2	3	RMMT 0235	Advertising	Ť	3	2	4 3 3
			20	5	— 18						_
				. •					17	2	17
_	FOURTH QUARTER					Students ma	y elect a different sequen	ce of End	alish wit	h adı	dear
RMMT 0310		Т	0	0	6	approval.			gc.r ****	auv	1501
RMMT 0311	Spec. Prob. in Retailing	T	0	0	2						
	Elective				4						
					12						
					12						

# RETAIL MID-MANAGEMENT COURSE DESCRIPTIONS

## Econ 0101 — Principles of Economics I

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

Prereg. Econ 0101.

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 0106 — Consumer Economics

The purpose of this is to help social service technology students become informed about buying, money management, and issues so that they can individually or collectively make changes which will strengthen the American marketplace. The student should understand the market system in order to get the most satisfaction from spending his income and be able to inform his clientele.

# RMMT 0101 — Introduction to Business

A survey course of the basic functions of American business, with an emphasis upon the responsibility of business's 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

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

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 0223 — Retail Buying

Prereq. 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

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

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 0104 — Salesmanship

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 0233 - Sales Promotion

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

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 0240 — Retail Accounting

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

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

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

Prereq. 2 quarters in Retailing and a minimum 2.0 overall average. 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

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.



# **ALLIED HEALTH TECHNOLOGIES**

(ASSOCIATE OF APPLIED SCIENCE DEGREE)

Associate Degree Nursing

Dental Hygiene

Medical Laboratory

Radiologic Technology

# **CERTIFICATE PROGRAMS**

(One Year)

Respiratory Therapy Technician
Practical Nursing

# ALLIED HEALTH TECHNOLOGIES ADMISSION PROCEDURES

# Dental Hygiene Medical Laboratory

# 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 has his high school counselor complete the transcript request card and forward it 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: Dean of Student Services, 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 type-written pages. The College would appreciate receiving a recent picture with the description. Both should be sent to the Dean of Student Services, P.O. Box 790, Portsmouth, OH 45662.
- Student takes the American College Test (ACT) and has scores forwarded to the College.
- 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 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 the Dental Hygiene, Medical Laboratory, Radiologic Technology or Respiratory Therapy Technician Program, 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.

# **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.	Hrs.	Hrs.
	FIRST QUARTER						FOURTH QUARTER				
		G	5	0	4	DtHy 0125	Clinical Dental Hygiene V	T	1	12	5
	Fund. of Composition	В	2	ŏ	2	DtHy 0201	General and Oral Pathology	Т	3	0	3
DtHy 0111	Head & Neck Anatomy I	В	3	3	4	DtHy 0202	Periodontics	Ţ	3	0	3
	Inorganic Chemistry Clinical Dental Hygiene I	Ť	2	6	3	DtHy 0203	Nutrition	Ţ	3	0	3
DtHy 0121	Anatomy & Physiology I	В	2 3 2 3	3 6 3	4	Soci 0101	Sociology	G	5	0	4
Biol 0290	Tooth Morphology I	T	Ō	3	1				<u> </u>	12	— 18
DtHy 0113	TOOTH MOIDHOLOGY		_						15	12	10
			15	15	18		FIFTH QUARTER				
						DtHy 0126	Clinical Dental Hygiene VI	Т	1	12	5
	SECOND QUARTER		_	_		DtHy 0126		B	4	0	4
Engl 0111	Contemp. Writing Skills I	G	5	0	4 2	DtHy 0204	<u> </u>	Ŧ	3	0	3
DtHv 0112	Head & Neck Anatomy II	B B	2	0	4	DtHy 0206	Public Health	Т	3	0	3
Chem 0122	Organic Chemistry	T	3	3 6 3 3	3	Diriy 0200	1 dbilo 1 louid.		_	_	_
DtHy 0122	Clinical Dental Hygiene II	B	3	3	4				11	12	15
Biol 0291	Anatomy & Physiology II	T	0	3	1						
DtHy 0114	Tooth Morphology II	•		_			SIXTH QUARTER				
			15	15	18	DtHv 0127	Clinical Dental Hygiene VII	Т	1	12	5
						Psyc 0101	Principles of Psychology	G	5	0	4
	THIRD QUARTER					•	Electives				3
E10110	Contemp. Writing Skills II	G	5	0	4				_	-	<del>-</del>
Engl 0112 Biol 0235	Microbiology	B	5 3	0 3 3	4				6	12	12
DtHy 0101	Radiology	Т	2	3	3				hl	اممة ام	haiaal
DtHy 0123	Clinical Dental Hygiene III	Т	. 1	8	4	After the f	irst quarter courses, all subs	equent	pasic ai	n coa	ential
DtHy 0102	General & Oral Histology						e closely related and, therefore	, must c	etakeni	ıı sequ	ennai
Bully 0102	and Embryology	T	3	0	3	order.			·	:41	4.4000
	<b></b> , <b></b>		_	_			may elect a different sequen	ce of t	nglish v	with a	avisor
			14	14	18	approval.					
	SUMMER QUARTER										
D.11. 0404	Clinical Dental Hygiene IV	т	2	12	6						
DtHy 0124	Dental Materials	÷	3	6							
DtHy 0103		Ġ	3	O							
Spch 0101	Speech	_	_		_						
			8	18	14						

# **DENTAL HYGIENE COURSE DESCRIPTIONS**

## DtHy 0111 — Head & Neck Anatomy I

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 0121 — Clinical Dental Hygiene I

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 0113 — Tooth Morphology i

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 0112 — Head & Neck Anatomy II

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 0122 — Clinical Dental Hygiene II

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 0114 - Tooth Morphology II

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 0101 - Radiology

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 0123 — Clinical Dental Hygiene III

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 0102 — General and Oral Histology and Embryology

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 0124 — Clinical Dental Hygiene IV

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

## DtHy 0103 — Dental Materials

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 0125 — Clinical Dental Hygiene V

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 0201 — General and Oral Pathology

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

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

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 0126 — Clinical Dental Hygiene VI

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

# DtHy 0204 — Pharmacology and Anesthesiology

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

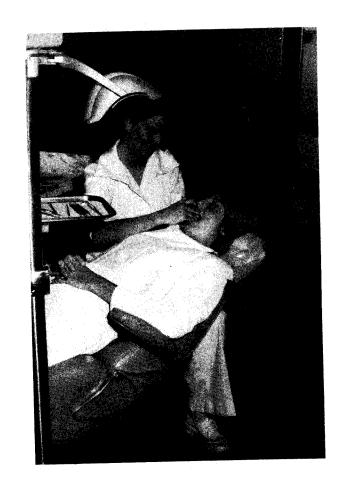
Analysis of concepts, techniques of presentation and goals of Dental Health Education. Major emphasis is placed on preparation and use of lesson plans and instructional materials for teaching dental education. Classroom instructions of dental health in Elementary and Secondary Schools.

# DtHy 0206 — Public Health

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.

# DtHy 0127 — Clinical Dental Hygiene VII

Complete dental hygiene care involving patient case reports; seminars.



# 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 Council on Medical Education of the American Medical Association in collaboration with the American Society of Medical Technologists (CME/AMA, ASCP).

## **Job Opportunities**

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



# MEDICAL LABORATORY CURRICULUM

Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER Fund. of Composition Allied Health Math I Inorganic Chemistry Anatomy & Physiology I Medical Technology I	G B B T	5 5 3 3	0 0 3 3 2	4 4 4 4 2	Engl 0121 MLTc 0121 MLTc 0101	FOURTH QUARTER Technical Writing I Hematology II Immunogenetics Medical Microbiology	G T B T	3 3 4 —	0 6 0 3 -	3 5 3 5 —
Engl 0111 Math 0109 Chem 0122 Biol 0291	SECOND QUARTER Contemp. Writing Skills I Allied Health Math II Intro. to Organic Chemistry Anatomy & Physiology II Medical Technology II	G B B T	18 5 5 3 3	8 0 0 3 3 3	18 4 4 4 4 2	Chem 0123 MLTc 0201 MLTc 0202 MLTc 0211 MLTc 0220		B T T T	3 3 3 1 —	0 3 3 6 0 —	3 4 4 5 1 
Soci 0101 Phys 0100 MLTc 0120 Biol 0235	THIRD QUARTER Principles of Sociology Physics (Basic)	В В Т В	17 4 4 3 3	9 0 3 6 3	4 5 5 5	Spch 0101 Psych 0101 MLTc 0212 MLTc 0203 MLTc 0221	Principles of Psychology Clinical Chemistry II Blood Banking	G G T T	3 5 3 3 1 —	0 0 6 6 0	4 5 5 1
			14	12	2 18	MLTc 0204 MLTc 0205	SEVENTH & EIGHTH QUARTERS Med. Lab. Internship Special Prob. in Med. Lab	T T	0 0	0	2

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

# MEDICAL LABORATORY COURSE DESCRIPTION

# MLTc 0111 — Medical Technology I

To introduce the medical laboratory student to the hospital, as well as the clinical laboratory. Emphasis will be directed toward services within the hospital other than the clinical pathology, and the responsibilities of the different personnel employed in the laboratory.

## MLTc 0112 — Medical Technology II

Designed to teach laboratory methodology common to all medical and non-medical laboratories. Theory and technique in skills such as the use of basic instruments, centrifuges, balances, pipets, dilution, and preparation of solutions, laboratory safety and laboratory bookkeeping will be emphasized.

## MLTc G120 — Hematology I

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

Prereq. 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 0101 — immunogenetics

Fundamentals of serum and cellular factors involved in natural and acquired immunity. Nature of antigens. Theories of antibody formation, theories of serodiagnosis, hypersensitivity. Mendel's Laws and development of gene theory of heredity. Analysis of human pedigrees, study of the gene frequency in population. Emphasis on the role of genetics in medical problems.

# MLTc 0102 - Medical Microbiology

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 0201 -- Clinical Microscopy

The procedure and methods of examination employed in the clinical microscopy laboratory are involved for the most part with chemical and microscopic examination of the urine and spinal fluid. Qualitative and quantitative laboratory procedures for the urine and spinal fluid examinations. The theory and application of the kidney tests are included in this section.

# MLTc 0202 — Immuno-Serology

Prereq. 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 0211 — Clinical Chemistry I

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 0220 — Medical Technology Seminar

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.

# MLTc 0212 — Clinical Chemistry II

Prereq. Clinical Chemistry I, ML 211

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 0203 — Blood Banking

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 0221 — Medical Technology Seminar

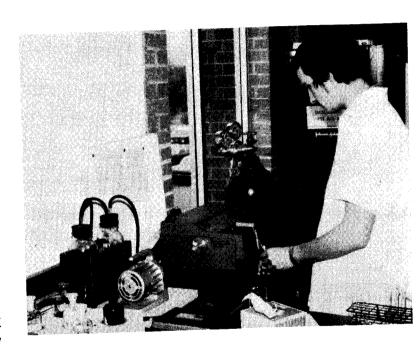
A continuation of ML 220 Medical Technology Seminar.

# MLTc 0204 — Medical Laboratory Internship

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

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.



# RADIOLOGIC TECHNOLOGY

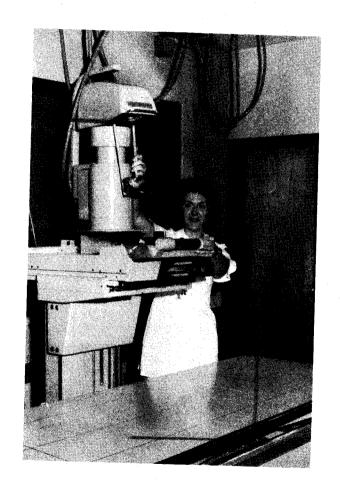
The Radiologic (X-Ray) Technology curriculum will prepare the graduate as a Radiologic Technologist. The Radiologic Technologist works under the supervision of a medical radiologist or physician in hospital x-ray departments, clinics, commercial x-ray laboratories, or doctors' offices. The responsibility 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	Course	Code	Class Hrs.		Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
No.							FIFTH QUARTER				
	FIRST QUARTER		_	•	4	RdIT 0105	Radiologic Technology V	Т	4	0	4
Engl 0101	Fund. of Composition	G	5	0	4	RdIT 0103	Practicum I	T	0	32	6 2
Math 0108	Allied Health Math I	В	5	0 3 3 2	4	RdIT 0211	Seminar I	Т	2	0	2
Phys 0100	Physics (Basic)	В	3	3	4	Mail UZZI	Semma		_	_	
Biol 0290	Anatomy & Physiology I	В	3	3	2				6	32	12
RdIT 0101	Radiologic Technology I	T	2	2							
Mari Olo.	•		18	8	18		SIXTH QUARTER				
			18	0	10	D-41T-0406	Radiologic Technology VI	Т	4	0	4
						RdIT 0106	Practicum II	Т	0	32	6 2
	SECOND QUARTER			_		RdIT 0212	Seminar II	T	2	0	
Engl 0111	Contemp. Writing Skills I	G	5	0	4	RdIT 0222	Semma n				
Phys. 0101		В	5	0	4				6	32	12
Biol 0291	Anatomy & Physiology II	B T	5 5 2 5	0 2	4						
RdIT 0102	Radiologic Technology II		2	2	2		SEVENTH QUARTER				
	Principles of Psychology	G	5	0	4		Radiologic Technology VII	Т	4	0	4
Psyc 0101	Fillicipios of Coyana Co		_			RdIT 0107	Practicum III	Ť	. 0	32	6
			22	2	18	RdIT 0213	Seminar III	Ť	2	0	2
						RdIT 0223	Seminar III	-		_	
	THIRD QUARTER								6	32	12
E 1 0110	Contemp. Writing Skills II	G	5	0							
Engl 0112		G	3	3	3		EIGHTH QUARTER				
Spch 0101	I Inorganic Chemistry	В	3	3	3 4		Eighth Goalthan	Т	4	0	
RdIT 0111	Physics (Radiologic)	Т	3	3	3 4	RdIT 0108	Radiologic Technology VIII	Ť	0	32	2 6
RdIT 0103		Т	2		3 3	RdIT 0214		Ť	2	0	) . 2
Hall 0103	Hadiologic			_		RdIT 0224	Seminar IV	•			
			16	(	18				6	32	2 12
	FOURTH QUARTER					<b>0</b>	may elect a different sequen	ice of I	English	with	advis
Engl 0121		G	3		3		may elect a unioroni equip		-		
Engl 0121 Soci 0101		G	5		0 4	approval.					
RdIT 0200	Basic Patient Care	Т	3		3 4						
RdIT 0200		n									
Haii 0201	Therapy Technology		2		3 3						
RdIT 0104		Т	2	2	3 3						
Hall olo-	11001010910			-							
			15	5	9 17						

# RADIOLOGIC (X-RAY) COURSE DESCRIPTIONS

### RdIT 0101 — Radiologic Technology I

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

This course concentrates on the following requirements of the American Medical Association: Radiologic terminology, principles of radiographic exposure, film critique, and radiographic positioning.

## RdiT 0111 — Physics (Radiologic)

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 0103 — Radiologic Technology III

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 0200 — Basic Patient Care

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 — Nuclear Medicine and Radiation Therapy Technology

Nuclear Medicine: Identification of radioactive pharmaceuticals and a study of their use in patient diagnosis with application of theory in a nuclear medicine laboratory.

Radiation Therapy Technology: Comparison of the various methods of administering radioactive therapy, placing emphasis on types of pathology being treated, with application of theory in a radiation therapy department.

# RdIT 0104 — Radiologic Technology IV

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

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 0211 - Practicum I

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

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 0106 — Radiologic Technology VI

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 0212 - Practicum !!

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 0222 - Seminar II

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 0107 — Radiologic Technology VII

This course concentrates on the following requirements of the American Medical Association: Radiographic positioning, principles of radiographic exposure, departmental administration, and film critique.

### RdIT 0213 - Practicum III

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 0223 — Seminar III

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 0108 — Radiologic Technology VIII

This course concentrates on the following requirements of the American Medical Association: Equipment maintenance, general review, and film critique.

### RdIT 0214 - Practicum IV

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 0224 — Seminar IV

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.



# 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	
Engl 0101 Math 0108 Chem 0121 RpTT 0101 Biol 0290	FIRST QUARTER Fund. of Composition Allied Health Math I Inorganic Chemistry Intro. to Resp. Therapy I Anatomy & Physiology	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	THIRD QUARTER Clinical Practice II Clinical Specialties Respiratory Procedure I	T T T	0 3 2 4	20 2 3 0	6 3 3 4
			18	6	 18				9	 25	16
RpTT 0111 RpTT 0121 RpTT 0102 Biol 0235	SECOND QUARTER Clinical Practice I Cardiopulmonary Phys. Intro. to Resp. Ther. Equip. Microbiology	T T T B	0 4 2 3 —	20 0 3 3 —	6 4 3 4 —	RpTT 0113 RpTT 0114 RpTT 0212		T T T	0 0 3 — 3	20 20 0 — 40	6 6 3 —

# RESPIRATORY THERAPY COURSE DESCRIPTIONS

# RpTT 0101 — Introduction to Respiratory Therapy

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 0111 — Clinical Practice I

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 0121 — Cardio-pulmonary Physiology

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 0102 — Introduction to Respiratory Therapy Equipment

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 0112 -- Clinical Practice II

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 0201 — Clinical Specialties

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 0211 — Respiratory Therapy Procedures I

A discussion of airway management, cardio-pulmonary resuscitation, intermittent positive pressure breathing and chest physiotherapy.

# RpTT 0202 — Pharmacology for Respiratory Therapy

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 0113 — Clinical Practice III

Theory review and practical application of procedures related to continuous ventilation and respiratory care of the critically ill patient.

# RpTT 0212 — Respiratory Procedures II

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.

# RpTT 0114 -- Clinical Practice IV

A continuation of Clinical Practice III with emphasis on alternatives to intermittent positive pressure breathing, pulmonary rehabilitation and pulmonary function testing.

# ASSOCIATE DEGREE NURSING ADMISSION PROCEDURES



- 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 has his high school counselor forward a transcript to the College. A transcript of any advanced education should be forwarded also.
- Student completes Biographical Information Form furnished by the College. The College would appreciate receiving a recent picture along with the Biographical Information Form and send it to: ADN Coordinator, Shawnee State College, P.O. Box 790, Portsmouth, OH 45662.
- Student 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 and results forwarded to the College.
- Student takes the American College Test (ACT) and has scores forwarded to the College.
- 6. Student is interviewed by the Director of Professional Nursing.
- 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) Completed high school algebra, biology, and chemistry (or their equivalent) with a 2.0 average
  - (b) A natural science score of 15 or more on the ACT
  - (c) After the student meets the above criteria, then the Nursing Admissions Committee makes the final selection.
- 9. Students who meet admission requirements to the nursing program but who are not admitted to the nursing sequence may elect to take academic courses in the nursing curriculum and reapply to the next class. Students enrolled in the College will be given preference, provided they have attained at least a 2.3 average.
- 10. Once a student has been officially admitted to the ADN Program, 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.

# **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 provisional accreditation by the Ohio State Board of Nursing Education and Nurse Registration. (Accreditation is provisional until the first nursing class has graduated from the new college.)

# ASSOCIATE DEGREE NURSING CURRICULUM

Course No.	Course	Code	Class Hrs.		Cr. Hrs.	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
ADNr 0101 Biol 0111 Chem 0121	FIRST QUARTER  Nursing I  Principles of Biology Intro. to Inorg. Chem.	Т В В	4 4 3 	4 2 3 —	6 5 4 —	ADNr 0201 ADNr 0202 ADNr 0203 Psyc 0173	FOURTH QUARTER Nursing IV FIFTH QUARTER Nursing V Nursing VI Human Growth & Devel.	T T G	4 3 3 4	12 6 6 0	6 6 4
ADNr 0102 Chem 0122 Biol 0290 Engl 0101	SECOND QUARTER Nursing II Intro. to Org. Chem. Prin. of Anat. & Phys. I Fund. of Composition I	T B B G	4 3 3 4 —	4 3 4 1 —	6 4 5 4 —	ADNr 0204 ADNr 0205 Soci 0101	SIXTH QUARTER Nursing VII	T T G	3 3 4	12 6 6 0	4
ADNr 0103 Biol 0291 Biol 0235 Psyc 0101	THIRD QUARTER Nursing III Prin. of Anat. & Phys. II Microbiology I Prin. of Psychology	T B B G	3 3 3 4 — 13	6 4 4 0 —	5 5 4	ADNr 0206 ADNr 0207	SEVENTH QUARTER Nursing IX Nursing X Elective	Ţ	10 4 0 3 —	8	10 4 3 -

# ASSOCIATE DEGREE NURSING COURSE DESCRIPTIONS

### ADNr 0101 - Nursing I

Provides a foundation in nursing care skills through guided learning experiences in the college nursing laboratory and clinical (community hospitals) laboratories.

# ADNr 0102 - Nursing II

Prereq. Nursing I.

Emphasizes the preventive, curative and restorative aspects of nursing, including the utilization of nutrition and chemical and physical agents.

# ADNr 0103 - Nursing III

Prereq. Nursing II.

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

Prereq. Nursing III.

Provides learning experiences in assessing, developing care plans and caring for people with problems associated with the endocrine and musculoskeletal systems.

### ADNr 0202 -- Nursing V

Prereq. Nursing IV.

Provides learning experiences in assessing, developing care plans and caring for people with problems associated with the genito-urinary and gastro-intestinal systems.

### ADNr 0203 - Nursing VI

Prereq. Nursing V

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 iii.

### ADNr 0204 - Nursing VII

Prereq. Nursing IV and V.

Provides learning experiences in assessing, developing care plans and caring for people with certain endocrine and neurological problems and those needing emergency care.

## ADNr 0205 - Nursing VIII

Prereq. Nursing V and VI.

Emphasizes the normal aspects of the family life cycle and the care of the mother and child during pregnancy, labor, and post natal and neonatal periods. Consideration is also given to deviations from the normal pattern.

### ADNr 0206 - Nursing IX

Prereq. Nursing VII and VIII.

Provides learning experiences in team leadership and in the care of people with problems associated with the eyes, ears, nose, throat, skin, and blood.

### ADNr 0207 - Nursing X

Prereq. Nursing VII and VIII.

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.









# PRACTICAL NURSING ADMISSION PROCEDURES

- 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.
- Graduation from an accredited high school or passed the general equivalency examination (G.E.D.)
- Applicant must be in good health; state of health is determined by a pre-entrance physical examination by the applicant's physician, including a chest x-ray, laboratory tests and immunization. (Immunizations should include those currently advocated by the local and/or State Department of Health.)
- Suitability is determined by entrance tests, personal interview and references. All applicants must be accepted by the Admissions Committee.

# PRACTICAL NURSING PROGRAM

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, as 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. 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.

# **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	Class Hrs.		Clin. Hrs.	Clock Hrs.	Cr. Hrs.					
	FIRST QUARTER	2	. 1	0	33		THIRD QUARTER LPNr 0113 Practical Nursing III	10	2	24	36
LPNr 0110	Body, Struc. & Func. I Nutrition Prin. of Psychology	2 5	0	0	22 55	4	or LPNr 0114 Practical Nursing IV	(10)	(2)	(24)	(36)
LPNr 0111	Practical Nursing I	6	6 - 7	6 - 6	198 308	<del>_</del>	FOURTH QUARTER LPNr 0114 Practical Nursing IV	10	2	24	36
	SECOND QUARTER	15	,	0	300	₹	or LPNr 0113 Practical Nursing III	(10)	(2)	(24)	(36)
LPNr 0102 Soci 0101	Body, Struc. & Func. II Prin. of Sociology	2 5	1 0	0	33 55	4					
LPNr 0112	Practical Nursing II	7 - 14	7 — 8	7 - 7	231  319	<del>-</del>					

# PRACTICAL NURSING **COURSE DESCRIPTIONS**

# LPNr 0101 - Body Structure and Function I

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 0102 — Body Structure and Function II

Prereq. LPNr 0101.

A continuation of Body Structure and Function I.

### LPNr 0110 - Nutrition

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

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

Prereq. 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 charging signs and symptoms are included. Nursing case of specific medical-surgical conditions is provided by clinical experience in Mercy Hospital.

# LPNr 0113 — Practical Nursing III

Prereq. LPNr 0112.

Medical-surgical nursing is the focus. Emphasis is on experience in dealing with short-term and long-term patient situations involving many therapies. Supervised clinical experience is provided in Mercy Hospital.

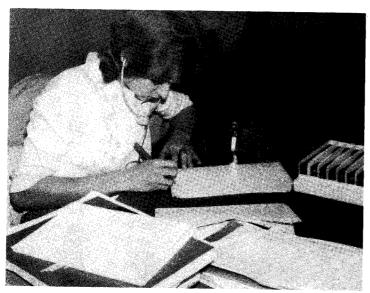
## LPNr 0114 - Practical Nursing IV

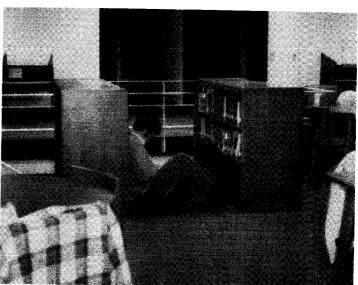
Prereg. LPNr 0113.

This is a course in maternal and child nursing. The course 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. The study and care of children in medicalsurgical situations includes experience in Mercy Hospital and the Pediatric Clinic and observation in the Happy Hearts School.









## **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 Plastics 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.

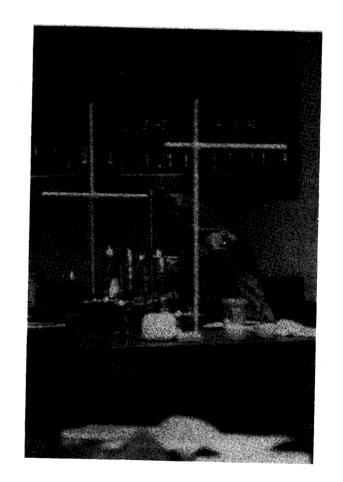
CHEMICAL RESEARCH TECHNICIAN — Assists chemists and engineers in the development of new products and processes by designing, constructing, and operating experimental chemical plants or by performing laboratory experiments.

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.		Cr. Hrs.
Engl 0101 Chem 0141	FIRST QUARTER Fund. of Composition Chemistry I Intro. to Chem. Tech. Machine Tools I College Algebra I	G B T T B	5 4 3 1 5 —	0 3 2 3 0 8	4 5 3 2 4 —	Engl 0121 Chem 0225 Chem 0205 Phys 0203	FOURTH QUARTER Technical Writing I Chemistry IV Chemistry V Physics (Heat, Light, Sound) Intro. to Chem. Engr.	G T T B T	3 3 3 3 —	0 3 3 3 2 —	3 4 4 3 —
Engl 0111 Chem 0142 Math 0131 Phys 0201 EnDr 0101	SECOND QUARTER Contemp. Writing Skills I Chemistry II College Algebra II Physics (Mechanics) Engineering Drawing I	G B B T	5 4 5 3 1 —	0 3 0 3 6 —	4 5 4 4 3 —	Chem 0206 PEng 0204 Chem 0203 Chem 0211	Process Instrumentation Chemistry VI Industrial Economics Pollution and Abatement Unit Operations I First Aid and Safety	T T G T T	3 3 5 3 3 1 —	3 0 2 2 1 —	4 4 4 3 3 1 —
Engl 0112 Chem 0143 Math 0132 Phys 0202 Spch 0101	Physics (Electricity)	G B B G	5 4 5 3 3 —	0 3 0 3 0 -6		PEng 0207 PEng 0202 Engr 0201 Chem 0212 Chem 0207	& Maintenance Production Control & Plan. Industrial Supervision Unit Operations II	T T T T	2 3 3 3 2 —	0 3 0 3 -	2 4 3 4 3 - 16

Students may elect a different sequence of English and/or math with advisor approval.

## CHEMICAL COURSE DESCRIPTIONS

## Chem 0101 — Introduction to Chemical Technology

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.

#### PEng 0102 - Machine Tools I

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 0206 — Introduction to Chemical Engineering

Prereq. Chem 121 and Math 131.

Introduction to the practices of chemical engineering. Stoichiometry, heat and material balances, heat, mass, and momentum transfer. Industrial problems and applications.

## Chem 0202 — Process Instrumentation

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

Prereq. 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 0211 — Unit Operations I

Prereq. Math 131 and PEng 0206.

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

## PEng 0207 — Fundamentals of Processing Equipment and Maintenance

Piping diagrams, heat exchangers, reactors, etc., commonly used in the chemical industry. Emphasis on maintenance problems and methods.

## PEng 0202 -- Production Control and Planning

Basic concepts of production planning and control methods. Inventory planning, facilities design, capacity considerations. Actual planning and scheduling exercises on an individual basis.

## Chem 0212 — Unit Operations II

Prereq. Chem 0211.

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

## Chem 0207 — Digital Computer Programming for Engineering Applications

Prereq. Math 132.

Introduction to programming in the FORTRAN language. Laboratory experience in computer operation. Emphasis on engineering and scientific applications of the computer.

## Engr 0201 — Industrial Supervision

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

## HPER 0227 — First Aid & Safety

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.

## PEng 0204 — Industrial Economics

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.

#### Chem 0225 --- Chemistry IV

Prereq. Chem 143.

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

#### Chem 0205 — Chemistry V

Prereq. Chem 143.

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

## EnDr 0101 --- Engineering Drawing i

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.

## **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.	_	Cr.
	FIRST QUARTER							Code	mrs.	Hrs.	Hrs.
Engl 0101 Math 0130 Econ 0101 CEng 0101 EnDr 0101	Fundamentals of Composition College Algebra I Economics I Intro. to Surveying	B B T	5 5 5 3	0 0 0 0	4 4 4 3	Engl 0121 Phys 0203 CEng 0211	& Sound)	G G	3 3	0	3
- 100	garage Stawning 1	Т	1  19	6 - 6	3  18	CEng 0113 CEng 0201	Surveying III	T T T	5 2 4	0 6 2	4 3 4
	SECOND QUARTER								17	11	18
Engl 0111 Math 0131 Phys 0201		G B	5 5	0 0	4 4	CEng 0202	FIFTH QUARTER			•	
CEng 0111	Physics I (Mechanics) Surveying I	B B	3	3	4	CEng 0203		T	2	0	2
EnDr 0102	Engineering Drawing II	T T	5 3 2 1	3 5 6	3	CEng 0204	Construction Supervision	T T	3	0	3
	5 · · · · · · · · · · · · · · · · · · ·	•		_	3	HPER 0227 Psyc 0101	First Aid & Safety	Ť	1	1	3 1
			16	14	18	CEng 0205	Prin. of Psychology Hydraulics for Civil Engr.	G	5	0	4
	THIRD QUARTER						Surveying IV	T	5 2 2	1	2
ngl 0112	Contemp. Writing Skills II	G	5	^				,	_	5	3
1441 0132	Irig. & Anal. Geometry	В	5	0	4				19	7	18
Eng 0112	Physics II (Electricity) Surveying II	B T	3	0 3 5 6	4 3		SIXTH QUARTER				
	Engineering Drawing III	T	1	6	3	CEng 0212	Engr. Prob. & Field Inspec. Highway Construction II	Ţ	0	3	1
			— 16	14	_	CEng 0207	Strength of Materials I	T T	5	0	4
			10	14	18	CEng 0208	Soil Materials & Testing	Ť	5 3 2	2	3
						CEng 0115	Surveying V Prin. of Sociology	T	4	0	3
						300.0101	Tim. Of Sociology	G	5	0	4
									— 19	8	18

Students may elect a different sequence of English and/or math with advisor approval.

## CIVIL ENGINEERING COURSE DESCRIPTIONS

## CEng 0101 — Introduction to Surveying

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

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 !!

Prereg. 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 0211 — Highway Construction I

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

## CEng 0113 - Surveying III

Prereq. CEng 0112.

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

#### CEng 0201 — Concrete

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

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

#### CEng 0203 — Statics

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

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

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 0114 — Surveying IV

Prereq. CEng 0113.

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

## CEng 0206 — Engineering Problems and Field Inspection

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

## CEng 0212 — Highway Construction II

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.

## CEng 0207 — Strength of Materials 1

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

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 0115 — Surveying V

Prereq. CEng 0114.

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

## EnDr 0101 — Engineering Drawing i

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

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

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.

# 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.		Cr. Hrs.
Engl 0101 Math 0130 Econ 0101 EMng 0111 EnDr 0101	FIRST QUARTER Fund. of Composition College Algebra I Economics I Electrical Fundamentals I Engineering Drawing I	G B B T T	5 5 5 2 1 —	0 0 3 6 -	4 4 4 3 3 -	EMng 0202 EMng 0203	FOURTH QUARTER Technical Writing I Phys. (Heat, Light, & Sound) Intro. Electro-Mech. Sys. Mechanical Analysis Mechanics and Dynamics Electronics II	G T T T	3 1 3 1 2 —	0 3 3 3 4 —	3 4 2 4 2 3 —
Engl 0111 Math 0131 Phys 0201 EMng 0101 EMng 0112	SECOND QUARTER Contemp. Writing Skills I College Algebra II Physics I (Mechanics) Electro-Mechanical Devices Elect. Fundamentals II	G B B T T	5 5 3 1 3 —	0 0 3 3 3 -		EMng 0205	FIFTH QUARTER  Prin. of Sociology Electronics Logic Circuits I Control Devices Automatic Control Systems Hydraulics and Pneumatics First Aid and Safety	G T T T T	5 2 2 3 3 1 —	0 5 3 3 2 1	4 3 3 4 3 1 —
Engl 0112 Math 0132 Phys 0202 EMng 012 EMng 0103	Physics (Electricity)  I Electronics I	G B B T T	5 5 3 2 1 —	0 0 3 6 3 	4 4 4 5 4 5 2	Psyc 0101 EMng 020 EMng 020 EMng 020 Engr 0201	2 Electronic Logic Circuits II 7 Electro-Mechanical Design 8 Electro-Mechanical System	G T T S T	5 2 1 2 3 —	0 5 6 4 0 —	4 3 3 3 3

Students may elect a different sequence of English and/or math with advisor approval.

# ELECTRO-MECHANICAL ENGINEERING COURSE DESCRIPTIONS

## EnDr 0101 -- Engineering Drawing I

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.

## EMng 0111 — Electrical Fundamentals !

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 0101 — Electro-Mechanical Devices

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 0112 — Electrical Fundamentals II

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

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 0103 -- Electro-Mechanical Drawing

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 0201 — Introductory Electro-Mechanical Systems

Prereq. 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

Prereq. 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

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 0122 — Electronics II

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 0211 — Electronics Logic Circuits i

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 0204 — Control Devices

Prereq. 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

Prereq. Math 0131, EMng 0112, 0101 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

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 0212 — Electronic Logic Circuits II

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.

## EMng 0207 — Electro-Mechanical Design

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

Prereq. EMng 0101, 0122, 0211, 0201 or advisor approval.

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.

## Engr 0201 — Industrial Supervision

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.

## HPER 0227 — First Aid & Safety

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.



## **PLASTICS ENGINEERING**

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	Code	Class Hrs.			Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
FIRST QUARTER Fund. of Composition Chemistry I College Algebra I Intro. to Plastics Machine Tools I	G B B T T	5 4 5 3 1 —	0 3 0 2 3 - 8	4 5 4 3 2 —	PEng 0201 Engl 0121 PEng 0209	Plastic Finishing	T G T T G	3 3 3 5 —	3 0 3 2 0 8	4 3 4 3 4 —
SECOND QUARTER Contemp. Writing Skills I Chemistry II College Algebra II Extrusion Molding Engineering Drawing I	G B B T . T	5 3 5 2 1 —			Psyc 0101	Test. of Plastic Materials Physics (Mechanics) Prin. of Psychology	T T T B G T	.5 3 2 3 5 1 —	1	
THIRD QUARTER Contemp. Writing Skills II Chemistry III Trig. & Anal. Geometry Thermo-Forming Injection Molding	G B B T T	5 3 5 2 2 —		4 4 3 3 3	Peng 0207 Engr 0201 PEng 0202 Phys 0202 PEng 0210	& Maintenance Industrial Supervision Prod. Control & Planning Physics (Electricity)	T T T B T	2 3 3 3 3	(	) 2 ) 3 3 4 3 4 3 4
	FIRST QUARTER Fund. of Composition Chemistry I College Algebra I Intro. to Plastics Machine Tools I  SECOND QUARTER Contemp. Writing Skills I Chemistry II College Algebra II Extrusion Molding Engineering Drawing I  THIRD QUARTER Contemp. Writing Skills II Chemistry III Trig. & Anal. Geometry Thermo-Forming	FIRST QUARTER Fund. of Composition G Chemistry I B College Algebra I Intro. to Plastics T Machine Tools I T  SECOND QUARTER Contemp. Writing Skills I College Algebra II Extrusion Molding T Engineering Drawing I T  THIRD QUARTER Contemp. Writing Skills II G Chemistry III B Extrusion Molding T Engineering Drawing I T  THIRD QUARTER Contemp. Writing Skills II G Chemistry III B Trig. & Anal. Geometry T Thermo-Forming T	FIRST QUARTER Fund. of Composition G 5 Chemistry I B 4 College Algebra I B 5 Intro. to Plastics T 1  Machine Tools I T 1  SECOND QUARTER Contemp. Writing Skills I G 5 Chemistry II B 3 College Algebra II B 5 Extrusion Molding T 2 Engineering Drawing I T 1  THIRD QUARTER Contemp. Writing Skills II G 5 Chemistry II B 5 Extrusion Molding T 2 Engineering Drawing I T 1  THIRD QUARTER Contemp. Writing Skills II G 5 Chemistry III B 3 Trig. & Anal. Geometry B 5 Thermo-Forming T 2	FIRST QUARTER Fund. of Composition G 5 0 Chemistry I B 4 3 College Algebra I B 5 0 Intro. to Plastics T 1 3 Machine Tools I T 1 3  SECOND QUARTER Contemp. Writing Skills I G 5 0 Chemistry II B 3 3 College Algebra II B 5 0 Extrusion Molding T 2 3 Engineering Drawing I T 1 6  THIRD QUARTER Contemp. Writing Skills II G 5 0 Third QUARTER Contemp. Writing Skills II G 5 0 Third QUARTER Contemp. Writing Skills II G 5 0 Third QUARTER Contemp. Writing Skills II G 5 0 Third QUARTER Contemp. Writing Skills II G 5 0 Third QUARTER Contemp. Writing Skills II G 5 0 Third QUARTER Contemp. Writing Skills II G 5 0 Third QUARTER Contemp. Writing Skills II G 5 0 Third QUARTER Contemp. Writing Skills II G 5 0 Third QUARTER Thir	Course   Code   Hrs.   Hrs.   Hrs.   Hrs.	Course   Code   Hrs.   Hrs.   Hrs.   No.	First Quarter   Fourth Quarter   Fourt	Course   Code   Hrs.   Hrs.   Hrs.   No.   Course   Code	Course   Code   Hrs.   Lab   Cr.   Hrs.   Hrs.	Course   Code   Hrs.   Hrs.

120

## PLASTICS ENGINEERING COURSE DESCRIPTIONS

## PEng 0101 — Introduction to Plastics

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

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

Prereq. 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

Prereq. 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

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

Prereq. 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 (polyrethane and polystyrene). Laboratory covers the practical applications of the lecture material.

## PEng 0202 — Production Control and Planning

Basic concepts of production planning and control methods. Inventory planning, facilities design, capacity considerations. Actual planning and scheduling exercises on an individual basis.

## EnDr 0101 -- Engineering Drawing I

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.

## PEng 0203 — Testing of Plastic Materials

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

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

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

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

Piping diagrams, heat exchangers, reactors, etc., commonly used in the chemical industry. Emphasis on maintenance problems and methods.

## Engr 0201 — Industrial Supervision

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

## PEng 0209 — Fabrication and Manufacturing of Plastic Products

Prereq. 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

Prereq. Chem 0122 and Math 0131.

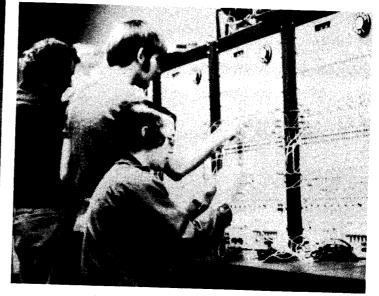
Study of various plastics with special emphasis on fitting the proper plastic to the correct end use. Problems will be introduced requiring the practical use of the theory developed in lecture. Properties such as ability to wield, decorate, and form (extrusion, injection, thermoforming) will be discussed.

## HPER 0227 - First Aid & Safety

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.











# PUBLIC SERVICE TECHNOLOGIES (ASSOCIATE OF APPLIED SCIENCE DEGREE)

Corrections Technology
Social Services Technology

NATURAL RESOURCES TECHNOLOGY
(ASSOCIATE OF APPLIED SCIENCE DEGREE)

**Parks and Recreation Administration** 

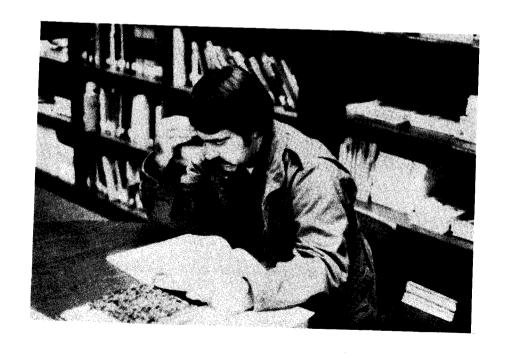
## **CORRECTIONS TECHNOLOGY**

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.
	<b></b>						FOURTH QUARTER	_	•	0	3
	FIRST QUARTER	G	5	0	4	Spch 0101	Speech I	G	3	U	J
Engl 0101	Fund. of Composition	G B	5 5	Ö	4	CorT 0201	Corr. Interview &	Т	2	3	3
Math 0101	Basic Mathematics	Ť	3	0	3		Counseling Techniques	τ̈́	2 2 5	3 3	3 3
CorT 0101	Intro. to Corrections	Ť	4	0	3	CorT 0202	Drug Abuse	в	5	Ó	4
CorT 0102	Criminology	Ġ	5	0	4	CorT 0203	Correctional Psychology	Ť	4	0	5
Psyc 0101	Prin. of Psychology	_		_	_	CorT 0204	Correctional Law	•		_	
			22	0	18				16	9	18
	OFFICE ON A DIED						FIFTH QUARTER				_
	SECOND QUARTER	G	5	0	4	CorT 0205	Group Interaction	Т	1	6	3 3 5 2 5
Engl 0111	Contemp. Writing Skills I	T	5 2 3 5 3	0 3 0 0 3	3	Engl 0121	Technical Writing I	G	3	0 6 2 0	3
CorT 0103	Juvenile Delinquency	В	3	Ō	3	CorT 0206		n T	3 2 5	6	5
CorT 0104	Criminal Law	G	5	Ō	4	CorT 0207		1	2	2	2
Soci 0101	Prin. of Sociology	Ť	3	3	4	CorT 0208		Т	5	U	5
CorT 0105	Probation and Parole	•	_	_	_	0011 0200	•			14	18
			18	6	18				14	14	. 10
	SHAPTED						SIXTH QUARTER				_
	THIRD QUARTER	G	5	0	) 4	O T 0000		Т	4	3	5 ) 4 ) 3 5 5
Engl 0112	Contemp. Writing Skills II	G T	4			CorT 0209		В	4	0	) 4
Psyc 0270	Abnormal Psychology	ì		č	3	CorT 0210 CorT 0211		G	3	(	3
CorT 0106		В В	2		3 3 2 2	CorT 0211		T	3	•	5 5
Acct 0101	Accounting I	Ť	3 2 2 2	(	2 2	COFT UZ1Z	Community ( regions				9 17
CorT 0107	Philosophy of Corrections	Ť	2	;	3 3				14	,	9 17
ExST 0101	Typing I		_	-	- — B 19			of	English	with	advisor
			18	1	8 19		s may elect a different sequ				
	SUMMER QUARTER	т	0	4		Psyc 010	hly recommended that course 1 be taken by the beginning ng to other course work; howe	ver, thi	s is not a	requ	irement.
CorT 0111		Ť	0		0 2	<b></b>		ology a	re requi	eu iv	r partic-
CorT 0112	Shecial Elopionio		_	-		P OWI"	the Internship and Special F	roblem	s course	s.	
			0	4	0 8	ipation in	tile interiorish and about				

## **CORRECTIONS COURSE DESCRIPTIONS**

## CorT 0101 — Introduction to Corrections

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

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

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 0106 — Constitutional Law

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 0105 - Probation and Parole

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 0104 -- Criminal Law

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 0107 — Philosophy of Corrections

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 iob performance.

## CorT 0111 - Internship

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

## CorT 0112 - Special Problems

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

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

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

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

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

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

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

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

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

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

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 0211 — Political Science

This is an introductory course in Political Science. The objective of the course is to provide the fundamentals of the operation of the American Political System. A special emphasis will be given to such core aspects as confict and consensus parties, elections, groups, and the economy, as they relate to national, state and local politics.

## CorT 0212 — Community Programs

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.



## 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

## **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.	SOCIAL SERVICE CURRICULUM  Class Lab Cr. Course  Class Lab Cr. Course													
140.	Course	Code	Hrs.		Hrs.	No.	Course	Code	Class Hrs.	Lab Hrs.				
	FIRST QUARTER						F0119911 0111		-1	1110.	п			
Engl 0101	Fund. of Composition I	G	5	0	4	CCT- 0004	FOURTH QUARTER							
Soci 0101	Prin. of Sociology	G	5	ŏ	4	SSTc 0201		Т	3	2	3			
Psyc 0101 Psyc 0173	Prin. of Psychology	G	5	ñ	4	CorT 0102	Criminology	T	4	0	3			
SSTc 0102		В	3	2	3	SSTc 0212	Penology & Corrections	Т	3		4			
0316 0102	Intro. to Social Services	T	š	0 2 2	3	Econ 0101		Т	3 2 5	3 0 0 6	2			
			_	_	_	SSTc 0113		В	5	0	4 2			
			21	4	18	0010 0113	Social Serv. Internship III	Т	0	6	2			
	SECOND QUARTER								17	11	18			
ngl 0111	Contemp. Writing Skills I	G	5	0	4		FIFTH QUARTER							
STC 0103	Contemp. Social Problems	В	4	Ó	3	Econ 0102	Prin. of Economics II	_						
Svc 0132	Sociology of Education Human Behavior	В	5	0	4	SSTc 0205	Historia Background	В	5	0	4			
STc 0104	Personal Growth & Devel.	В	5 3 2 0	0 0 0	3	33.3 0200	Historic Background to Urban Society	_	_					
STc 0111	Social Son, Internation	T	2	0	2	SSTc 0210	Medical Sociology	B	3	2	3			
	Social Serv. Internship I	T	0	6	2	SSTc 0207	U.S. Minority Groups	Ţ	3	0	3			
				_	_	SSTc 0114	Social Serv. Internship IV	T T	3	0	3 3 2			
			19	6	18	CorT 0103	Juvenile Delinquency	Ť	0 4	2 0 6 0				
	THIRD QUARTER						Domiquency	•	4	0	3			
ngi 0112	Contemp. Writing Skills II	G	5	0	4				18	8	18			
310 0105	marriage and the Family	T	3	1	3		SIXTH QUARTER							
	Speech I	G	3 3 2 5	ó	3	SSTc 0208								
	Rehabilitation	T	2	0	2	3310 0208	Community &							
	Abnormal Psychology	G	5	Ō	4	SSTc 0209	Community Resources Seminar	T	3	2	3			
710 0112	Social Serv. Internship II	Т	0	0 6	2	SSTc 0203		T	1	3	3 2 3			
			_	_	_	SSTc 0211	Gerontology Social Prob. & Police	T	4	0	3			
			18	7	18	00.00211	Relations	_	_					
							Electives	Ţ	2 3	3	3			
						SSTc 0115	Social Serv. Internship V	G T	3	0	3			
							vorv. miernsmp v	I	0	6	2			
	0.	4 .					English with advisor		13	14	16			

Students may elect a different sequence of English with advisor

## SOCIAL SERVICE COURSE DESCRIPTIONS

## Psyc 0173- Human Growth and Development

Prereq. Psyc 0101.

A study of the development of man from birth to maturation. A direct observation of children.

## SSTc 0102 -- Introduction to Social Services

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

Prereq. Soci 0101.

Social issues in contemporary America. Society responses to structural defects in society.

## SSTc 0104 — Personal Growth and Development

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 0111-0115 — Social Services Internship I-V

Prereg. 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 0105 - Marriage and the Family

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

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

An examination of education as a social institution. Social factors influencing learning, teaching and school programs. Social trends and problems in education.

## SSTc 0201 - Public and Child Welfare

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

A study of the life style and problems encountered by the aged.

## SSTC 0204 - Social Group Work

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

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

Examination of minority groups, causes and consequences of prejudice and discrimination.

## SSTc 0208 — The Community and Community Resources

The American community as a social system. Emphasis on ecology, stratification, and social power.

#### SSTc 0209 - Seminar

Course designed for students to do individual research related to their particular area of interest in Social Services.

## SSTc 0210 — Medical Sociology

Sociological concepts of illness and health; structure, role, rank, and value of health personnel and patients.

## SSTc 0211 — Social Problems and Police Relations

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

Societal reactions to offenders against law, viewed historically and cross-culturally.

# 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.	
	TIPOT OUARTER						FOURTH QUARTER	_	•		3
	FIRST QUARTER	В	2	4	3	PRAd 0211	Maint. of Recreat. Areas I	Ţ	2 2	6 5 3	4
Biol 0105	Field Biology	В	2 2 5 5	3	3	PRAd 0201	Outdoor Recreation	Ţ	3	3	
Biol 0215	General Ecology	Ğ	5	ō	4	PRAd 0202	Forest Manage. & Recreat.	T G	5	ñ	4 4 3
Engl 0101	Fund. of Composition Basic Mathematics	В	5	0 0 6	4	Soci 0101	Prin. of Sociology	G	3	Ö	3
Math 0101 EnDr 0101	Engineering Drawing I	Ť	1	6	3	Spch 0101	Speech I	G	_	_	
EUDIOIOI	Linging Diaming		 15	— 13	17				15	14	18
	SECOND QUARTER		15	13	.,						
		т	2	2	3		FIFTH QUARTER	-	3	3	4
PRAd 0101	Intro. to Recreation	Ė		3	4	PRAd 0203	Fiscal Operations	T	3	3	•
PRAd 0102	Soil Management	Ť	2	3 3	3	PRAd 0204	Recreat. Park Layout	т	1	6	3
PRAd 0103	Contemp. Writing Skills I	Ġ	3 2 5 5	0	4		& Design	÷	2	6 6	3 3
Engl 0111 Math 0130	College Algebra I	B	5	0	4	PRAd 0212	Maint. of Recreat. Areas II	В	5	ŏ	4
Matirorso	Odliege Algobia :		_	-	_	Econ 0101	Prin. of Economics I	Ğ	5	0	4
			17	8	18	Psyc 0101	Prin. of Psychology	_	_	_	18
	THE OLIA PIER								16	15	18
	THIRD QUARTER	т	3	3	4		ALLA DIED				
PRAd 0104	Taxonomy of Vertebrates Water Pollution & Sanitation		2		3		SIXTH QUARTER	Т	3	3	4
	Contemp. Writing Skills II	Ġ	3 2 5 5 2	4 0 0 5	4	PRAd 0205	Water Recreation	÷	3		4
Engl 0112 Math 0105	Business Math	В	5	0	4	PRAd 0206		÷	2	3 0	2
CEng 0111		Т	2	5	3	PRAd 0207	7 Seminar		1	1	1
OLing U			_			PRAd 0200	Orientation to Employment Wildlife Management	Ť	3	2	, З
			17	12	18	PRAd 0209		Т	1	1	
						PRAd 0210 Acct 0251		В	3	2	3
	SUMMER QUARTER	-	0	40	6	ACC1 0201	<b>Gy5.5</b>		16	12	18
PRAd 0121	Parks & Recreation Intern.	Т	U	40	U				10	12	0
PRAd 0122	Seminars for Critique of Experience		0	0	2		may elect a different seque	nce of	Enalish	and/o	r math
	OI Experience		_	_		Students	may elect a different seque	100 01			
			0	40	8	with advis	or approval.				

## PARK AND RECREATION ADMINISTRATION COURSE DESCRIPTIONS

## PRAd 0101 -- Introduction to Recreation

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

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

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

Prereq. 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

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

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

Weekly evaluation report.

## PRAd 0211 -- Maintenance of Recreational Areas I

Maintenance of park grounds, outdoor recreational areas, boating and swimming areas, maintenance of turf and golf courses.

#### PRAd 0201 — Outdoor Recreation

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

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

A study of the various means of financing park ceprations; including general bonds, revenue bonds, and self operation of revenue-producing complexes.

## PRAd 0204 — Recreational Park Layout and Design

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 0212 — Maintenance of Recreational Areas II

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.

#### PRAd 0205 -- Water Recreation

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

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

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

Prereg. 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

Prereq. 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 0210 — First Aid and Safety

Responsibilities of park and recreation supervisors in first aid. General first aid procedures. Contacting local emergency agencies, etc. Include water front safety procedures, safety in the operation of small equipment.

#### EnDr 0101 — Engineering Drawing I

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.

#### Acct 0251 — Systems Accounting

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.



## **BOARD OF TRUSTEES**

W. N. Brown, Chairman F. D. Hyland, Vice Chairman Orville Ferguson, Sr. William H. Horr Mrs. William D. Kennedy Edward Levi Dr. Jerome Sheets R. L. Stevens James C. Strafford

#### **ADMINISTRATION**

Robert W. Flinchbaugh, Ph.D., President
Frank C. Taylor, M.A., Vice President
Tom F. Foti, M.A., Dean of Technical Programs
Gene S. Come, Ph.,D., Dean of Academic Programs
Arnold V. McCoy, M.A., Dean of Student Services
Fred W. Chrisman, M.Ed., Director of Evening Programs
Michael L. Gampp, M.B.E., Director of Business Affairs
John C. Williams, AMLS., Director of Library
Theresa D. Midkiff, MLS., Assistant Director, Library

## STUDENT SERVICES

Richard R. Howard, M.A., Acting Dean of Student Services
Paul D. Crabtree, Ph.D., Counselor
William E. Russell, M.S., Admissions Officer & Registrar
Richard T. Davidson, M.A., Placement Coordinator
Eugene D. Wilson, B.S., Veterans Coordinator
John Bishop, A.A.B., Computer Programmer

#### **FACULTY**

- 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
- James R. Cooley Biological Science A.B., M.A. Marshall University
- 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
- Ronald Deis Director, Radiologic Technology B.S. Ohio State University; A.S. Kettering College of Medical Arts
- Janice Duncan, RN Practical Nursing Diploma in Nursing, Mercy Hospital School of Nursing
- 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
- R. Thomas Frazee Chemistry B.S. Marshall University, M.S. lowa State
- Signe Froberg Director, Associate Degree Nursing B.S. University of Washington; Certificate, Nursing Supervision
- Anna Gampp Associate Degree Nursing B.S. Ohio State University
- Gary Gemmer Chemistry B.S. Morehead State University; M.A.T. Miami University
- Rembert Glass Philosophy A.B. Emory University; A.M. University of Chicago
- Ali A. Golji Director, Medical Laboratory Technology B.S. MT(ASCP) Wayne State University; M.S. Marshall University
- Patricia Griffiths Dental Hygiene Certificate of Dental Hygiene, University of Michigan
- Emily Gulker Theater-Speech B.S.Ed. Ohio State University; M.A. Marshall University
- Elizabeth Herms Associate Degree Nursing A.B. Hood College Sibylle Herrmann Biological Science B.S. Ohio University; M.S. University of Michigan

- Glen Hiles Psychology and Sociology B.S. Rio Grande College; M.S. Methodist Theological School
- Phillip David Hoberty Director, Respiratory Therapy B.A. Wittenberg University; B.S. Ohio State University
- Betty Hodgden English B.A. Otterbein College; M.A. Marshall University
- Clark Hubler Science Education B.A. Western Washington College; M.A., Ed.D. Columbia University
- C. Ray Irwin Program Coordinator of Engineering Technologies, Electro-Mechanical Engineering B.S.E.E. Ohio University
- Robert Jacobs English A.B., M.A. Ohio University
- Jack James Psychology and Sociology A.B., M.S., M.Div., Marshall University
- Phyllis Kegley Mathematics B.S. Ohio State University; B.A. Marshall University
- John Kelley History B.A. Marian College; M.A. in History Indiana University; Additional Graduate Work, Indiana University
- Joyce Kiser Executive Secretarial B.A., M.B.E. Morehead State University
- Shannon Kiser English B.S. Morehead State University; M.A. University of Kentucky
- Carolyn Sue Kirsch Associate Degree Nursing B.S. Syracuse University
- Dennis Kirsch Plastics, Chemical Engineering B.Che., M.S.Che., M.B.A. Ohio State University
- Dan Light Engineering Drawing B.S. Ohio State University; M.S. Asbury Theological Seminary
- Wayne Linder Psychology A.A. Burlington Jr. College; B.A., M.A. University of lowa
- Robbie Luther Retail Mid-Management B.A. West Virginia Wesleyan College; M.S. Marshall University
- Pam Markey Medical Laboratory A.B., M.S. Indiana University Dorothy Matthews, RN Associate Degree Nursing R.N. St. Leo's Hospital School
- Timothy Ohrstrom Electro-Mechanical Engineering B.S.E.E. Ohio University
- Madeleine Polierin Associate Degree Nursing A.A.S. Bristol Community College; B.A. Sacred Hearts College
- Sally Ream, RDH Dental Hygiene Certificate of Dental Hygiene, Ohio State University
- Betty Robinson, RN Instructor, Program Coordinator Practical Nursing B.S. University of Cincinnati
- 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 Billy Spears — Data Processing & Computer — B.S. Air Force Institute of Technology

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

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

Ralph Wisniewski — Biological Science — B.S.Ed., M.S. Ohio Uni-

versity
Linda Wooddell — Practical Nursing — B.S. University of Alabama School of Nursing







## 1975-76 SCHOOL CALENDAR

FALL '75		SPRING '76	
Sept. 9-12	Registration	Mar. 31	First Day of Classes
Sept. 22	First Day of Classes	Mar. 31	Late Registration—Late Fee: \$5.00
Sept. 22-23	Late Registration—Late Fee: \$5.00	Apr. 1	Late Registration—Late Fee: \$5.00
Oct. 3	Last Day to Add a Class	Apr. 13	Last Day to Add a Class
Oct. 13	Columbus Day — No Classes	Apr. 19	School Closed
Oct. 20	Last Day for Refund	Apr. 28	Last Day for Refund
Nov. 7	Last Day to Drop a Class or Apply for Non-Credit	May 18	Last Day to Drop a Class or Apply for Non-Credit
Nov. 26-28	Thanksgiving Vacation (Begins 4:00 p.m.	May 31	Memorial Day — No Classes
	November 26th)	June 2-3-4	Registration for Summer Session
Dec. 2-3-4	Registration for Winter Quarter	June 9	Quarter Ends
Dec. 9	Quarter Ends	June 10-11-14	Exams
Dec. 10-11-12	Exams	June 12	Graduation Day
Dec. 16	Grades Due by 1:00 p.m.	June 16	Grades Due by 1:00 p.m.
WINTER '76		I SUMMER SES	SION '76
Jan. 5	First Day of Classes	June 21	First Day of Classes
Jan. 5-6	Late Registration—Late Fee: \$5.00	June 21-22	Late Registration—Late Fee: \$5.00
Jan. 16	Last Day to Add a Class	July 4	Holiday — No Classes
Feb. 2	Last Day for Refund	July 15-16	Registration for Second Summer Session
Feb. 23	President's Holiday — No Classes	July 23	Quarter Ends
Feb. 24	Last Day to Drop a Class or Apply for Non-Credit	July 25	Grades Due at 1:00 p.m.
Mar. 10-11-12	Registration for Spring Quarter	II SUMMER SE	SSION '76
Mar. 18	Quarter Ends	Aug. 2	First Day of Classes
Mar. 19-22-23-24	Exams	Aug. 2-3	Late Registration—Late Fee: \$5.00
Mar. 26	Grades Due by 1:00 p.m.	Sept. 3	Quarter Ends
	• • • • • • • • • • • • • • • • • • • •	Sept. 6	Grades Due at 1:00 p.m.

## **FALL '76**

Sept. 20

First Day of Classes (Please call the college for more information on the '76-'77 school calendar)

