

**The ROANE STATE
Community College
CATALOG-1977-1978**

Roane State Community College offers its programs of instruction to qualified persons regardless of race, color, creed, sex or national origin.

An Equal Opportunity/Affirmative
Action Employer

ROANE STATE COMMUNITY COLLEGE

HARRIMAN, TENNESSEE 37748



Roane State Community College is an Institution of Higher Education of the Tennessee State Board of Regents; accredited by the Southern Association of Colleges and Schools; an institutional member of the American Association of Community and Junior Colleges, the Southern Association of Junior Colleges and the Tennessee College Association; approved by the State Department of Education. Courses are approved by the State Approving Agency for Veterans Training.

GENERAL CATALOG 1977-78

Roane State Community College began the first session of its educational operation on September 20, 1971.

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Telephone: (615) 354-3000

A NOTE TO VISITORS

The College administration, faculty, and staff welcome visitors to the campus. The administrative offices are open Monday through Friday, 8:00 a. m. until 5:00 p.m. The Admissions Office, Business Office, and Book Store are open from 8:00 a. m. to 12:00 a.m. on Saturdays.

ACADEMIC CALENDAR

School Year 1977-78

SUMMER QUARTER 1977*

First Session

June 8	Registration
June 10	Classes begin (see summer schedule)
June 14	Last day to add classes or register late
June 30	Last day to withdraw from classes
July 4	Holiday—Independence Day
July 15	Last class

Second Session

July 18	Classes begin
July 20	Last day to add classes or register late
August 5	Last day to withdraw from classes
August 19	Last class

Full Term

June 8	Registration
June 10	Classes begin
June 17	Last day to add classes or register late
July 4	Holiday—Independence Day
July 22	Last day to withdraw from classes
August 15-19	Last class
August 22	Grades due in Admissions Office

FALL QUARTER 1977

September 19	Registration
September 22	Classes begin
September 29	Last day to add classes or register late
November 4	Last day to change from audit to credit or credit to audit
November 4	Last day to withdraw from classes
November 24-25	Thanksgiving Holidays
December 2	Last class
December 5	Grades due in Admissions Office

WINTER QUARTER 1978

January 3	Registration
January 5	Classes begin
January 12	Last day to add classes or register late
February 15	Last day to change from audit to credit or credit to audit
February 15	Last day to withdraw from classes
March 15	Last class
March 16	Grades due in Admissions Office
March 16, 17, 20, 21	Staff development and/or class make-up**
	<i>W F M T</i>

*See page 23 for registration procedures and fees for Summer Quarter.

**These days may be holidays for students and faculty depending on weather conditions during Winter Quarter.

SPRING QUARTER 1978

March 22	Registration
March 24	Holiday—Good Friday
March 27	Classes begin
April 3	Last day to add classes or register late
May 5	Last day to change from audit to credit or credit to audit
May 5	Last day to withdraw from classes
June 2	Last class
June 3	Graduation
June 5	Grades due in Admissions Office

SUMMER QUARTER 1978***First Session**

June 7	Registration
June 9	Classes begin
June 13	Last day to add classes or register late
June 29	Last day to withdraw from classes
July 4	Holiday—Independence Day
July 14	Last class

Second Session

July 17	Classes begin
July 19	Last day to add classes
August 4	Last day to withdraw from classes
August 18	Last class

Full Term

June 7	Registration
June 9	Classes begin
June 16	Last day to add classes or register late
July 4	Holiday—Independence Day
July 21	Last day to withdraw from classes
August 18	Last class
August 21	Grades due in Admissions Office

*See page 23 for registration procedures and fees for Summer Quarter.

STATE BOARD OF REGENTS

Statutory

Honorable Ray Blanton, *Chairman*
Governor of the State of Tennessee, *Ex-officio*

Dr. Roy S. Nicks, *Chancellor*

Dr. Sam H. Ingram
The Commissioner of Education, *Ex-officio*

Honorable Edward S. Porter
The Commissioner of Agriculture, *Ex-officio*

Dr. G. Wayne Brown, *Executive Director*
Tennessee Higher Education Commission, *Ex-officio*

NAMED FROM CONGRESSIONAL DISTRICTS AND AT-LARGE

Mr. James H. Jones, Jr., <i>Vice Chairman</i>	Mt. Pleasant
Dr. Kenneth Ezell	Murfreesboro
Mr. Dale Glover	Obion
Mr. J. Frank Taylor	Huntingdon
Mrs. Johnella H. Martin	Nashville
Dr. Claude C. Bond	Chattanooga
Miss Ella V. Ross	Johnson City
Mr. Charles J. Liner	Athens
Mr. George M. Klepper, Jr.	Memphis
Mr. J. Howard Warf	Hohenwald
Mr. David White	Knoxville
Mr. J.C. Eoff, Jr.	Tulahoma
Mr. Anthony A. Seaton (<i>Student Member</i>)	Johnson City



State Board of Regents—Seated, left to right: Miss Ella V. Ross, Johnson City; Mrs. Johnella Martin, Nashville; James H. Jones Jr., Mt. Pleasant, Vice-Chairman; Dr. Roy S. Nicks, Chancellor; Dale Glover, Obion; and J. Howard Warf, Hohenwald; Second row, left to right: Dr. C. C. Bond, Chattanooga; Dr. Sam P. Ingram, Tennessee Education Commissioner; Anthony A. Seaton, Johnson City (student member); J. C. Eoff Jr., Tulahoma; David White, Knoxville; J. Frank Taylor, Huntingdon; Dr. Kenneth Ezell, Murfreesboro; and Charles J. (Buddy) Liner, Athens. Also on the board, but not pictured, are Gov. Ray Blanton, Chairman; Dr. G. Wayne Brown, Executive Director of the Tennessee Higher Education Commission; Edward S. Porter, Tennessee Commissioner of Agriculture; and George M. Klepper Jr., Memphis.

ROANE STATE COMMUNITY COLLEGE

COLLEGE PERSONNEL

Executive Officers

PresidentCUYLER A. DUNBAR
Dean of InstructionHAROLD L. UNDERWOOD
Dean of Administrative ServicesFRED H. MARTIN
Dean of Student Personnel ServicesWALTER S. PATTON
Business ManagerJ. ALTON JOHNSON
Director of Personnel and Affirmative ActionJOEL G. ZACHRY

Administrative Officers

Director of Community ServicesPAUL E. GOLDBERG
Director of Continuing EducationMARTHA C. KNOX
*Director of Cooperative Programs
 and Placement*LINDA H. ISABEL
Director of Student Financial AidJULIA A. NISWANDER
LibrarianJOHN R. NEEDHAM
Director of Admissions and RecordsLOUISE R. GREENE
Director of AthleticsJ. PHILLIP ALLEN
Director of Computer Services (Acting)GERALD H. NELSON
Director of Public InformationJAMES A. JOYCE
Director of Guidance and CounselingGARY G. DUNFORD
Director of Resource DevelopmentHENRY H. COOPER
Superintendent of Maintenance and SecurityKINCH M. YORK

Divisional Heads

*Chairperson, Division of
 Career Education*W. CARROLL MARSALIS
*Chairperson, Division of
 Education (Acting)*MELVIN A. KIRKPATRICK
Chairperson, Division of HumanitiesNANCY H. FISHER
*Chairperson, Division of Mathematics
 and Science*ANNE P. MINTER
Chairperson, Division of Social ScienceGARY L. HEIDINGER

Department Heads

Department of Allied HealthINA J. INGWERSEN
Department of Business and EconomicsBOBBY F. THOMAS
Department of Energy and Resource Management FRANK L. CHARTON
*Department of Engineering
 Technology*B. BARTLEY KLIMA

ADMINISTRATION AND FACULTY

- ADAMS, SUSAN K. *Instructor of Physical Education*
 B.S., Middle Tennessee State University—Health, Physical Education,
 Recreation
 M.Ed., Middle Tennessee State University—Health, Physical Education,
 Recreation
- ALLEN, J. PHILLIP *Director of Recreation*
Assistant Professor of Athletics
 B.S., Western Kentucky University—Physical Education
 M.S., University of Tennessee—Recreation
- ATKINSON, EDWARD R., JR. *Assistant Professor of Psychology*
 B.A., Southwestern at Memphis—English
 M.A., George Peabody College—English
 M.A., Austin Peay State University—Psychology
- BAILEY, LEONARD C. *Instructor of Business*
 B.S., University of Tennessee—Business Administration
 M.B.A., Pace University—Business Administration
- BARNES, DELORISE C. *Assistant Professor of Business*
 B.S., Livingston College—Business Education
 M.S., University of Tennessee—Office Administration, Educational
 Psychology
 Additional Graduate Work, University of Tennessee
- BARNES, R. VERLE *Instructor of English, Journalism*
 A.B.J., University of Georgia—Magazine and Newspaper Journalism
 M.A., University of Georgia—Journalism and Communication
 Additional Graduate Work, University of Florida
- BILBREY, JUNE A. *College Nurse*
 R.N., Fort Sanders School of Nursing—Nursing
- BOULDIN, C. LARRY *Assistant Professor of Mathematics*
 B.A., David Lipscomb College—Mathematics
 M.S., Middle Tennessee State University—Mathematics
 Additional Graduate Work, University of Tennessee—Education
- BREAZEALE, WAYNE L. *Coordinator of Veterans Affairs*
 B.S., University of Kentucky—Business Administration
 M.S., University of Tennessee—Guidance
 Ph.D., University of Tennessee—Educational Psychology and Guidance
- BROWN, JAMES E. *Assistant Professor of Art*
 B.A., Athens College—Art
 M.A., University of Alabama—Art
 Additional Graduate Work, University of North Carolina
- BRYANT, GAY D. *Assistant Professor of Business*
 B.S., West Georgia College—Business Education
 M.S., University of Tennessee—Business Education
- BYRNE, THOMAS E. *Instructor of Biology*
 B.S., Tennessee Technological University—Biology
 M.S., Tennessee Technological University—Biology

- CALVERT, MARJORIE H. *Assistant Librarian*
 B.A., Skidmore College—Psychology
 M.L.S., Rutgers University—Library Service
- CHARTON, FRANK L. *Department Head, Energy and
 Resource Management*
Assistant Professor of Geography
 B.A., George Peabody College—Social Studies
 M.A., Michigan State University—Geography
 Ph.D., Michigan State University—Geography
- CHRISTIAN, ALEETA P. *Instructor of Developmental Studies*
 A.B., Birmingham-Southern College—Religion and Philosophy, Spanish
 Additional Graduate Work, University of Tennessee
- CHRISTIAN, FLOYD L. *Assistant Professor of Mathematics*
 A.B., Birmingham-Southern—Mathematics
 M.A., Samford University—Mathematics
 Ph.D., University of Mississippi—Mathematics
- COOPER, HENRY H. *Director of Resource Development*
 B.S. University of Tennessee—Communications
 M.S. University of Tennessee—Educational Administration and Supervision
 Additional Graduate Work, University of Tennessee
- CURRIE, SARA R. *Assistant Professor of Developmental
 English and Reading*
 B.A., Wilson College—English
 M.Ed., Boston University—Reading
 Ed.D., Boston University—Reading
- DAVIS, BEULAH A. *Instructor of English*
 B.A., Carson-Newman College—English
 M.A., East Tennessee State University—English
 Ed.S., George Peabody College—English
- DUNBAR, CUYLER A. *President*
 B.S., University of Tennessee—Agricultural Education
 M.A., Austin Peay State University—Educational Administration/
 Counseling
 Ed.D., Auburn University—Educational Administration
- DUNFORD, G. GARY *Director of Counseling and Guidance*
 B.S., Brigham Young University—Psychology
 M.S., Brigham Young University—Counseling and Guidance
 Ed.D., New Mexico State—Counseling and Guidance
- EDWARDS, LINDA M. *Instructor of Biology*
 B.S., University of Tennessee—Botany
 M.S., University of Tennessee—Botany
- EISON, JAMES A. *Instructor of Psychology*
 B.A., S. U. N. Y. at New Paltz—Psychology
 M.S., University of Tennessee—Psychology
 Additional Graduate Work, University of Tennessee
- FISHER, BARBARA H. *Instructor of Developmental
 English and Reading*
 B.S., University of Tennessee—Education
 Additional Graduate Work, University of Tennessee

- FISHER, BRUCE A. *Assistant Professor of Biology, Chemistry*
 B.S., Lincoln Memorial University—Biology
 M.S., University of Tennessee—Zoology
 Ph.D., University of Tennessee—Zoology
- FISHER, NANCY H. *Chairperson, Humanities Division*
Associate Professor of English
 A.B., Women's College, University of North Carolina—English
 M.A., Florida State University—English
 Ph.D., University of Tennessee—English
- FRITTS, HARRY E. *Instructor of Music*
 A.B., Carson-Newman—Bible, Religious Education
 M.S., University of Tennessee—Music Education
- GEBBIA, PHILIP P. *Instructor of Sociology*
 B.A., Tusculum College—Sociology
 M.A., East Tennessee State University—Sociology
 Additional Graduate Work, University of Tennessee
- GLOVER, IRVING T. *Assistant Professor of Chemistry*
 B.S., University of North Carolina—Science Education
 M.Ed., University of North Carolina—Education
 Ph.D., University of Virginia—Chemistry
- GOLDBERG, PAUL E. *Director of Community Services*
 B.S., University of Tennessee—Economics
 M.S., University of Tennessee—Geography
 Ed.D., University of Tennessee—Educational Administration and Supervision
- GREENE, LOUISE R. *Director of Admissions and Records*
 B.S., University of Tennessee—History
 M.S., University of Tennessee—Educational Administration and Supervision
- GUINN, GERALD E. *Coordinator of Printing*
 Maryville College
- HAMMOND, JAMES M. *Assistant Director of Admissions and Records*
 B.A., Tennessee Wesleyan—English
 M.A., Middle Tennessee State University—English
- HEIDINGER, GARY L. *Chairperson, Social Science Division*
Assistant Professor of Sociology
 B.S., Bethel College—History
 M.A., George Peabody College—History
 Additional Graduate Work, University of Mississippi, Auburn University, Alabama A & M University, and University of Tennessee
- HOAGLAND, JUDY K. *Instructor of Economics*
 B.S., Middle Tennessee State—Political Science
 M.A., University of Tennessee—Political Science
- HOAGLAND, WILLIAM M. *Instructor of Political Science*
 B.S., Lambuth College—History
 M.S.S., University of Mississippi—History
 Additional Graduate Work, University of Tennessee

- HOLDER, MABRE M. *Instructor of Business*
 B.S., Middle Tennessee State University—Business (Marketing)
 M.B.A., Middle Tennessee State University—Business Administration
- HOWARD, BENJAMIN S. *Associate Professor of English, German*
 B.A., University of Tennessee—English
 M.A., University of Tennessee—German
 Ph.D., University of Georgia—Comparative Literature
 Additional Graduate Work, University of North Carolina and
 Ludwig-Maximilians Universitat, Munich, Germany
- HOWARD, REBECCA M. *Instructor of Mathematics*
 B.S., North Carolina State—Mathematics
 M.A.M., North Carolina State—Mathematics
- INGWERSEN, INA J. *Coordinator of Allied Health Programs*
 Nyverheids School, Arnhem, Netherlands—College Home Economics
 Diaconessenhuis, Hilversum, Netherlands—Psychiatric Nursing
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 Placement*
 B.S., Le Moyne College—Mathematics
 M.S.E., Arkansas State University—Guidance
- JENKINS, MARGARET G. *Instructor of English*
 B.A., University of Tennessee—English
 M.A., University of Tennessee—English
- JOHNSON, J. ALTON *Business Manager*
 B.S., North Georgia College—Business Administration
- JOHNSON, JUDITH M. *Assistant Professor
 of Developmental Studies*
 B.S., University of Tennessee—Psychology
 M.S., University of Tennessee—Adult and Continuing Education
- JONES, KATHY R. *Instructor of Reading*
 B.A., David Lipscomb College—Speech
 M.Ed., Middle Tennessee State University—Reading
- JORDAN, BERNARD E. *Vocational Counselor*
 B.A., B.S., Syracuse University/University of Illinois—Mathematics
 M.Ed., Northeastern University—Education
 Additional Graduate Work, George Peabody College
- JOYCE, JAMES A. *Director of Public Information*
 B.A., Emory and Henry College—French and German
 M.S., University of Tennessee—Broadcasting and Journalism
- KARR, CLAIRE E. *Research Associate*
 A.B., Connecticut College for Women—History
 M.A.T., Boston College—History
- KENNEDY, STEPHEN D. *Guidance Counselor*
 B.A., Syracuse University—Psychology
 Additional Graduate Work, University of Tennessee

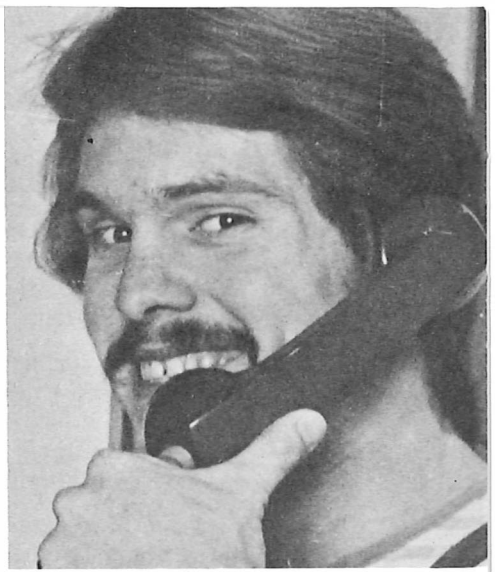
- KIRKPATRICK, MELVIN A. *Acting Chairperson,
Division of Education
Assistant Professor of Mathematics*
B.S., Tennessee Technological University—Mathematics, Secondary Education
M.S.T., Middle Tennessee State University—Mathematics
Additional Graduate Work, University of Tennessee
- KLIMA, B. BARTLEY *Department Head, Engineering Technology
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Additional Graduate Work, University of Tennessee
- KRING, JAMES B. *Assistant Professor of Biology*
B.S., Maryville College—Biology
M.S., University of Tennessee—Botany
- LANDERS, ANDY G. . . *Assistant Professor of Physical Education*
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M.A., Tennessee Technological University—Health and Physical Education
- MARSALIS, W. CARROLL *Chairperson, Career Education
Division
Associate Professor of Political Science*
B.A., Mississippi College—Political Science, Constitutional Law
M.A., University of Mississippi—Political Science
Additional Graduate Work, Auburn University
- MARTIN, FRÉDRIC H. *Dean of Administrative Services*
B.S., University of Tennessee—Science Education
M.S., University of Tennessee—Science Education
Ed.D., University of Tennessee—Curriculum and Instruction
- MINTER, ANNE P. *Chairperson, Division of Mathematics
and Science
Associate Professor of Chemistry*
B.S., Georgia College at Milledgeville—Chemistry
M.A., Duke University—Microbiology
Ed.D., University of Tennessee—Science in Higher Education
- MOORE, ALICE A. *Instructor of Medical Records*
B.S., Indiana University—Medical Records Administration
R.R.A., Registered Record Administrator
- MOORE, MICHAEL L. *Assistant Professor of Business*
B.S., Indiana University—Business Administration
M.B.A., University of Tennessee—Accounting
C.P.A., State of Tennessee
- NAMKUNG, I. AGNES *Assistant Professor of Computer Science*
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M.Ed., Yonsei University—Mathematics
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 B.A., Tennessee Technological University—English
 M.A., George Peabody College—Library Science
- NELSON, GERALD H. *Acting Director of Computer Services*
 Computer Specialist, United States Air Force
- NISWANDER, JULIA A. *Financial Aid Director*
 B.S., East Tennessee State University—History, English
- ORTON, THOMAS H. *Assistant Professor of Geography*
 B.S., Valparaiso University—Physical Education, Geography
 M.A., Wayne State University—Geography
 Additional Graduate Work, Southern Illinois University
- PARKS, REBECCA L. *Instructor of Business*
 B.S., Tennessee Technological University—Accounting
 M.S., Oklahoma State University—Accounting
- PARSONS, STEVE J. *Assistant Professor of Accounting*
 B.S., Tennessee Technological University—Accounting
 M.B.A., University of Tennessee—Accounting
 C.P.A., State of Tennessee
- PATTON, WALTER S. *Dean of Student Personnel Services*
 B.S., New Mexico State University—American History
 M.A.T., New Mexico State University—History, Government
 Ed.D., New Mexico State University—Educational Administration
- POLLARD, OWEN J. *Assistant Professor of Philosophy*
 B.A., Assumption College—Philosophy
 B.D., M.A., University of Montreal—Religion
 M.A., University of Tennessee—Philosophy
 Additional Graduate Work, L'Université de Montréal, L'Université de
 Laval, Catholic University of America, Bellarmine, Bowling Green State
 University, University of Tennessee
- PORTERFIELD, DELLA N. *Radiologic Technologist*
 American Registry of Radiologic Technology
- POULIN, GERALD D. *Assistant Professor of English*
 B.A., Middle Tennessee State University—French and English
 M.A.C.T., Middle Tennessee State University—English
- POWERS, ANNE D. *Coordinator of Graphic Arts*
 B.F.A., University of Tennessee
- RANDOLPH, HELEN E. *Assistant Professor of Chemistry*
 A.B., Women's College UNC—Chemistry
 M.A., University of North Carolina—Physical Chemistry
 Additional Graduate Work, Murray State College
- RUDOLPH, JOHNNIE J. *Instructor of Engineering*
 A.S., Cleveland State—Design and Drafting
 B.S., University of Tennessee—Architecture
- SAFDIE, ROBERT *Instructor of Psychology*
 B.A., Tennessee Technological University, University of Tennessee—
 Psychology
 M.A., Middle Tennessee State University—General Clinical

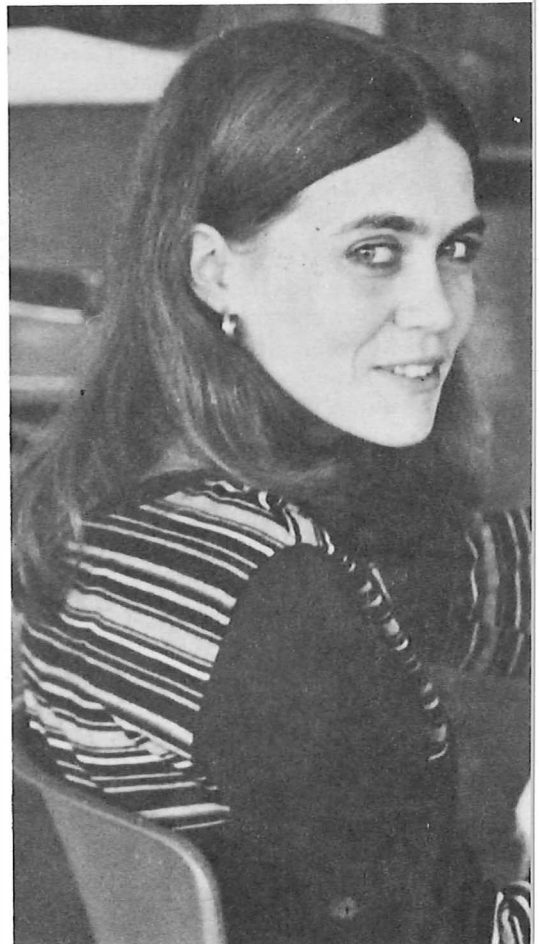
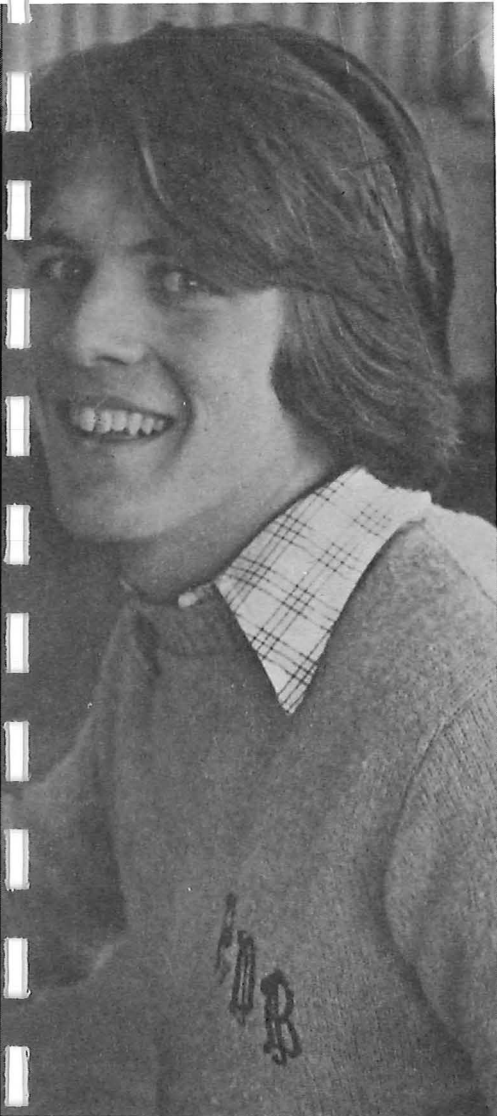
- SAIDAK, LANCE R. *Assistant Professor of Physical Education*
 B.S., Springfield College—Physical Education
 M.Ed., Florida Atlantic University—Physical Education
 Ed.D., University of Tennessee—Physical Education
- SAMS, EDWIN B. *Instructor of English*
 B.A., Mars Hill College—English
 M.A., University of Tennessee—English
- SIENKNECHT, MARTHA E. *Assistant Professor of History*
 B.A., University of North Carolina—History
 M.A., Vanderbilt University—English, History
 Additional Graduate Work, University of Tennessee
- SIMMONS, LINDA J. *Assistant Professor of History*
 B.A., Blue Mountain College—Social Science, History
 M.S.S., University of Mississippi—History, Political Science
- SMITH, PHILIP L. *CETA Counselor*
 B.S., University of Tennessee—Psychology
 M.S., University of Tennessee—Educational Psychology
- SWEET, DAVID G. *Instructor of Engineering*
 B.S.E.E., University of Tennessee—Engineering
 Additional Graduate Work, University of Tennessee
- TEETER, W. SCOTT *Instructor of Police Science*
 B.S., Eastern Kentucky University—Law Enforcement
 M.S., Eastern Kentucky University—Criminal Justice Education
- THOMAS, BOBBY F. *Department Head, Business and Economics*
Instructor of Business
 B.S., University of Tennessee—Marketing
 M.B.A., University of Tennessee—Industrial/Personnel Management
- THOMPSON, J. RONALD *Instructor of Engineering*
 B.S.E.E., Tennessee Technological University—Electrical Engineering
- THOMPSON, JOANN W. *Guidance Counselor*
 B.S., Tennessee Technological University—Health and Physical Education
 M.S., University of Tennessee—Guidance
- UNDERWOOD, HAROLD L. *Dean of Instruction*
 B.S., Mississippi State—Science Education
 M.S.C.S., University of Mississippi—Mathematics
 Ed.D., Auburn University—Educational Administration
- WINKLES, BILLY B. *Assistant Professor of Physics, Mathematics*
 B.S., University of Tennessee—Engineering Physics
 Ph.D., University of Tennessee—Physics
- WOOLLY, JAMES M. *Coordinator of Music and Band Director*
Assistant Professor
 B.S.E., University of Arkansas—Music
 M.S.E., University of Arkansas—Music
 Ph.D., University of Southern Mississippi—Music
- WORKS, LARRY P. *Assistant Professor of Psychology*
 B.S., East Tennessee State University—Health and Physical Education
 M.S., University of Montana—Health, Physical Education and Psychology

- YATES, WILLIAM B. *Assistant Professor of Speech and Theatre*
B.A., Tennessee Wesleyan College—History
M.A., University of Tennessee—Public Address and Theatre Arts
- YORK, KINCH M. *Superintendent of Maintenance and Security*
Memphis State University
- ZACHRY, JOEL G. *Director of Personnel and Affirmative Action*
B.S., Tennessee Technological University—Education
M.S., Middle Tennessee State University—Biology
Additional Graduate Work, Middle Tennessee State University and
University of Tennessee
- ZAWISLAK, RONALD L. *Instructor of Mathematics and Physics*
B.A., Vanderbilt University—Physics, Astronomy
M.A.T., Vanderbilt University—Physics, Astronomy
Additional Graduate Work, University of Wyoming





General Information



COLLEGE HISTORY

In 1957 the Pierce-Albright report on higher education in Tennessee was submitted to the Tennessee Legislative Council. This report emphasized the need for additional higher education to be available to the typical Tennessee resident.

In 1963 the Tennessee General Assembly appropriated \$200,000 for use over a two-year period to implement the Pierce-Albright report. The State Department of Education, under the leadership of Commissioner J. Howard Warf, developed plans for the establishment of community colleges to service areas without access to higher education.

The 1965 Tennessee General Assembly authorized the establishment of the first three community colleges, one to be located in each of the State's three grand divisions. Sites of these institutions were Columbia, Cleveland, and Jackson. The cities of Dyersburg and Tullahoma were the locations of additional community colleges opened in 1969. In 1970 Morristown was the location of the sixth community college.

Acting upon the recommendation of Governor Buford Ellington and the State Department of Education, the 1969 Tennessee General Assembly authorized the establishment of three additional community colleges. These colleges were to be located in Sumner, Roane, and Shelby Counties. In July 1969, Commissioner J. Howard Warf and other State Department of Education officials visited various sites proposed for the new college in Roane County. After appropriate studies were made, a site on Patton Lane was chosen for the location of the institution.

In May of 1970, Dr. Cuyler A. Dunbar was selected as the first president of the College; and in the late summer, temporary offices were opened on Ruritan Road in South Harriman.

When bids for construction were opened in August 1970, the low bid was approximately \$700,000 higher than the amount of available funds. Subsequently, a decision was made by State Department of Education officials and College administrative personnel to open in temporary quarters in the fall of 1971.

Bids for construction were opened again in June 1971, and construction was begun in July 1971. The building was occupied in August 1973.

Groundbreaking for the second building on the Roane State campus was held in January 1977. This facility, a Technologies Building, will house the college's Career Education Division. Construction of the new facility is scheduled for completion in 1978. This new building has become increasingly important due to the tremendous growth of the college. From Fall Quarter 1973 to Fall Quarter 1976, enrollment at the college increased 125 percent.

Location

The campus of Roane State Community College consists of 104 acres located between the cities of Harriman, Kingston, and Rockwood in Roane County, Tennessee. The permanent site is near the intersection of Patton Lane and U.S. Highway 70. The campus is easily accessible from Interstate 40 and U.S. Highways 27 and 70.

PURPOSE

The educational offerings of Roane State Community College are based upon the belief that development of the individual for a useful and productive life in a democratic society is a primary obligation of the public educational system.

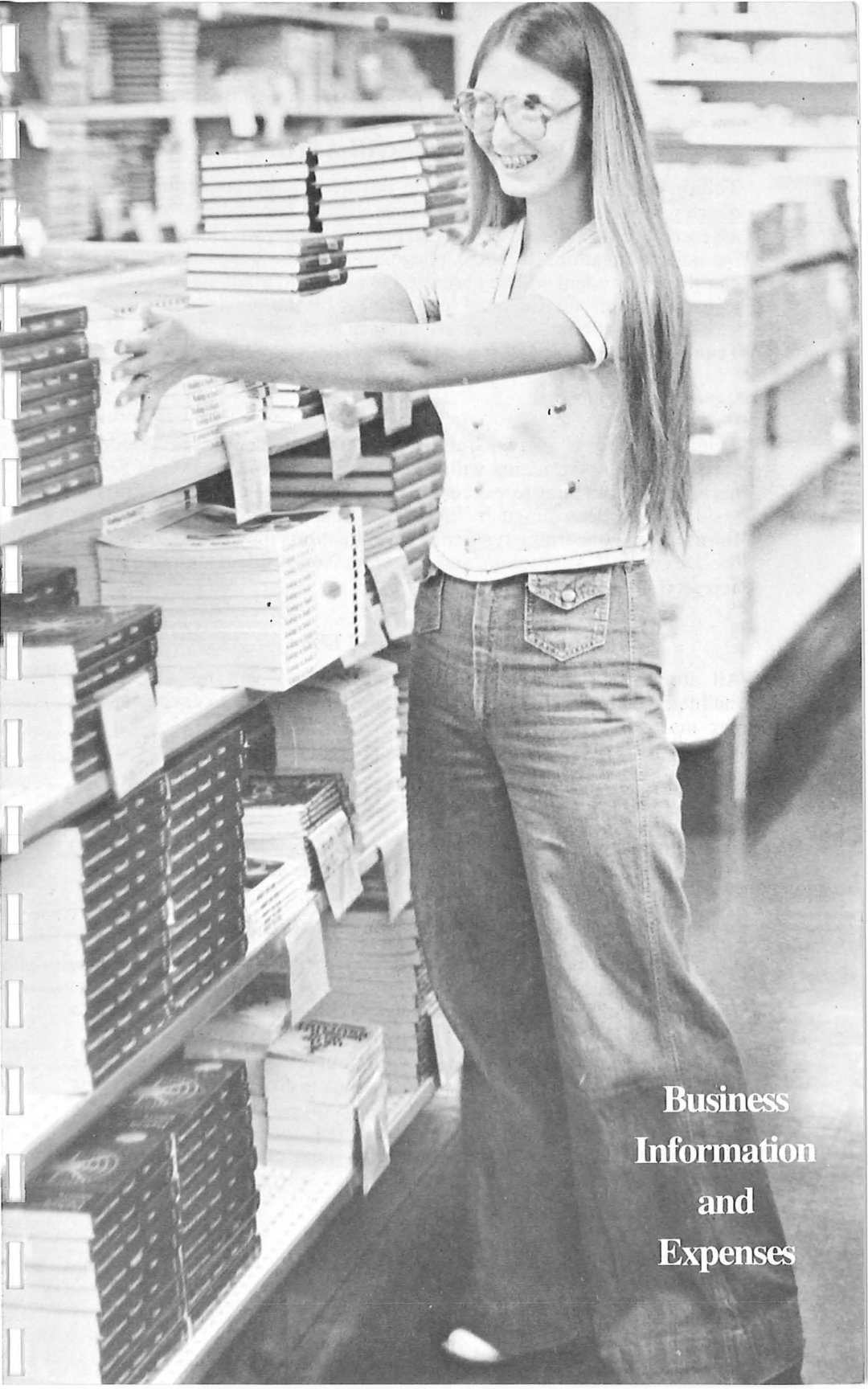
Roane State Community College accepts as its purpose the development of the cultural, intellectual, physical, and vocational resources of the people of the surrounding area through qualified teaching, professional counseling and guidance, and comprehensive services offered to students and community.

Roane State Community College offers day and evening programs combining general education and technical education sufficiently flexible to provide for the changing educational needs of the community. The program is three-fold: (1) To serve those who wish to transfer and complete a four-year college education; (2) To serve those who wish to complete their formal education upon graduation from Roane State Community College; and (3) To serve the entire community through an adult program based on community needs and demands.

Roane State Community College accepts the philosophy that a community college is not merely two years of continuing high school or just the first two years of college, but is a separate entity. Roane State recognizes that students have differing learning characteristics which require varied instructional techniques, and the college endeavors to provide the leadership which will enable each individual to develop and mature toward the realization of his/her potentialities. Thus, students are encouraged to actively participate in the social, cultural and intellectual activities of the college and its community.

Specifically, Roane State attempts to fulfill its role in the educational process by: (a) Promoting a liberal admissions policy; (b) Developing a broad curriculum of superior quality; (c) Supporting a position of low fees for its students; (d) Maintaining a fundamental orientation toward the area it serves; (e) Establishing adequate articulation with four year institutions; and (f) Development of reasonable vocational and occupational objectives.





Business
Information
and
Expenses

BUSINESS REGULATIONS

Tuition and fees are assessed and payable at the beginning of each quarter. Registration is not considered to have been completed until all assessed tuition and fees have been paid. Students who have not met all financial obligations to the College will not be permitted to attend classes. No student will be permitted to re-enroll, graduate, or receive a transcript until all financial obligations to the College have been satisfied. **All tuition and fees are subject to change by direction of the Tennessee State Board of Regents.**

TUITION

Tuition is free to all residents of the State of Tennessee. Students classified as non-residents will be assessed tuition at the rate of \$26.00 per quarter hour, not to exceed \$312.00 per quarter. The definition of residency as determined by the State Board of Regents will apply. Information concerning residence classifications may be obtained from the Director of Admissions and Records. **Non-resident students will be accepted, if space permits.**

MAINTENANCE FEE

All students, both resident and non-resident, will be assessed a maintenance fee of seven dollars per quarter hour, not to exceed \$84.00 per quarter.

NO DEFERRAL OF FEES AND TUITIONS.

AUDIT FEE

Fees for courses being audited are the same as those taken for credit. Auditors are not required to take examinations and receive no credit.

COMMUNITY SERVICE COURSE FEES

Fees for Community Service courses will vary with length of the course, cost of materials provided, equipment, or miscellaneous resources. Students enrolling for Community Service courses are not required to pay an application fee or late registration fee.

Fees charged for Community Service courses are refundable in the following manner: (1) 100% refund if the class is dropped prior to the first class meeting, (2) 70% refund if the class is dropped after the first class meeting, but prior to the second class meeting, and (3) no refund is made after the second class meeting, for individual classes missed, or for programs of fewer than 10 contact hours. All refunds will be made promptly.

SUMMER QUARTER FEES

The Summer quarter consists of a full-quarter term, or two separate terms of approximately five weeks each.

Students may register for the entire quarter, for the two separate terms, or for only one of the separate terms. Tuition and fees for the entire Summer quarter are the same as for other quarters. Students are required to indicate at the initial enrollment for the Summer quarter if they wish to be assessed for the full quarter at the rate of \$7.00 per quarter hour not to exceed \$84.00 or if they wish to be assessed at the rate of \$7.00 per hour in which case a student taking a total of more than 11 quarter hours during the two separate terms would be required to pay more than the maximum of \$84.00. Once the student has indicated his election, he may not shift from one plan to the other. The Business Office will assist a student in selecting a plan that is to the advantage of the student.

Summer school refunds will follow a posted schedule different from the regular refund schedule.

OTHER FEES

Application Fee—Each student applying for admission to the College for credit courses for the first time will be assessed a \$5.00 application fee. This fee is a one-time only fee, is not applicable to the maintenance fee, and is not refundable.

Late Registration Fee—Students failing to complete the registration requirements on the appointed registration day will be assessed a late registration fee of \$0.50 per quarter hour not to exceed \$5.00. This fee is not refundable.

Change of Schedule Fee—Students changing schedules after registration day will be assessed a fee of \$3.00. This fee is not refundable. No charge is made if the change is initiated by the College.

Replacement of Lost I.D. Card—\$1.00

Laboratory Fee—A fee of \$2.50 per quarter is assessed for all biological and physical science courses.

Physical Education Fees—A fee for certain physical education courses which are conducted in facilities not owned by the College will be assessed at the rate charged by the owner of the facility. This fee is refundable only to the extent allowed by the owner.

Individual Instruction in Music—Quarterly fees for individual instruction in music are assessed as follows:

Full-time students	1 lesson per week	\$20.00
	2 lessons per week	\$30.00
Part-time students	1 lesson per week	\$30.00
	2 lessons per week	\$60.00

Musical Instrument Rental Fee—\$5.00 per quarter.

Lock or Key Replacement Fee—\$3.00

Late or Early Examination Fee—A \$5.00 fee is assessed for students taking examinations after the appointed time for the examination. Arrangements must have been made with the instructor of the class. No late examination will be administered without the presentation of a paid receipt from the Business Office to the instructor. This fee is not refundable.

Graduation Fee—Graduating students are assessed a fee of \$10.00 to cover the cost of a diploma and other related costs. This fee must be paid at the beginning of the quarter in which a student is scheduled to graduate. This fee is not applicable to certificate graduates. This is a one time fee and is not refundable.

Returned Check Fee—A fee of \$5.00 is assessed for each check returned to the College by the bank. A student may contest this fee successfully by presenting a letter from the bank in which it is clearly indicated that the check was returned through error by the bank. The College reserves the right to refuse to accept a check for any purpose from persons who have developed a record of presenting checks that have subsequently been returned by their bank.

REFUNDS

Students withdrawing from class are entitled to a partial refund according to the following schedule:

Period of Enrollment	Percentage of Refund
On or before first class day	100%
Two through seven days	80%
Eight through fourteen days	60%
Fifteen through twenty-one days	40%
Twenty-two through twenty-eight days	20%
After twenty-eight days	No Refund

Summer school refunds follow a posted schedule different from the regular schedule.

No refund is due on courses which are dropped unless the sum of the remaining hours calculated at the hourly rate is less than the total amount paid or the maximum quarterly tuition and/or maintenance fee.

When classes are cancelled by the College, students are entitled to a full refund subject to the limitation in the immediately preceding paragraph.

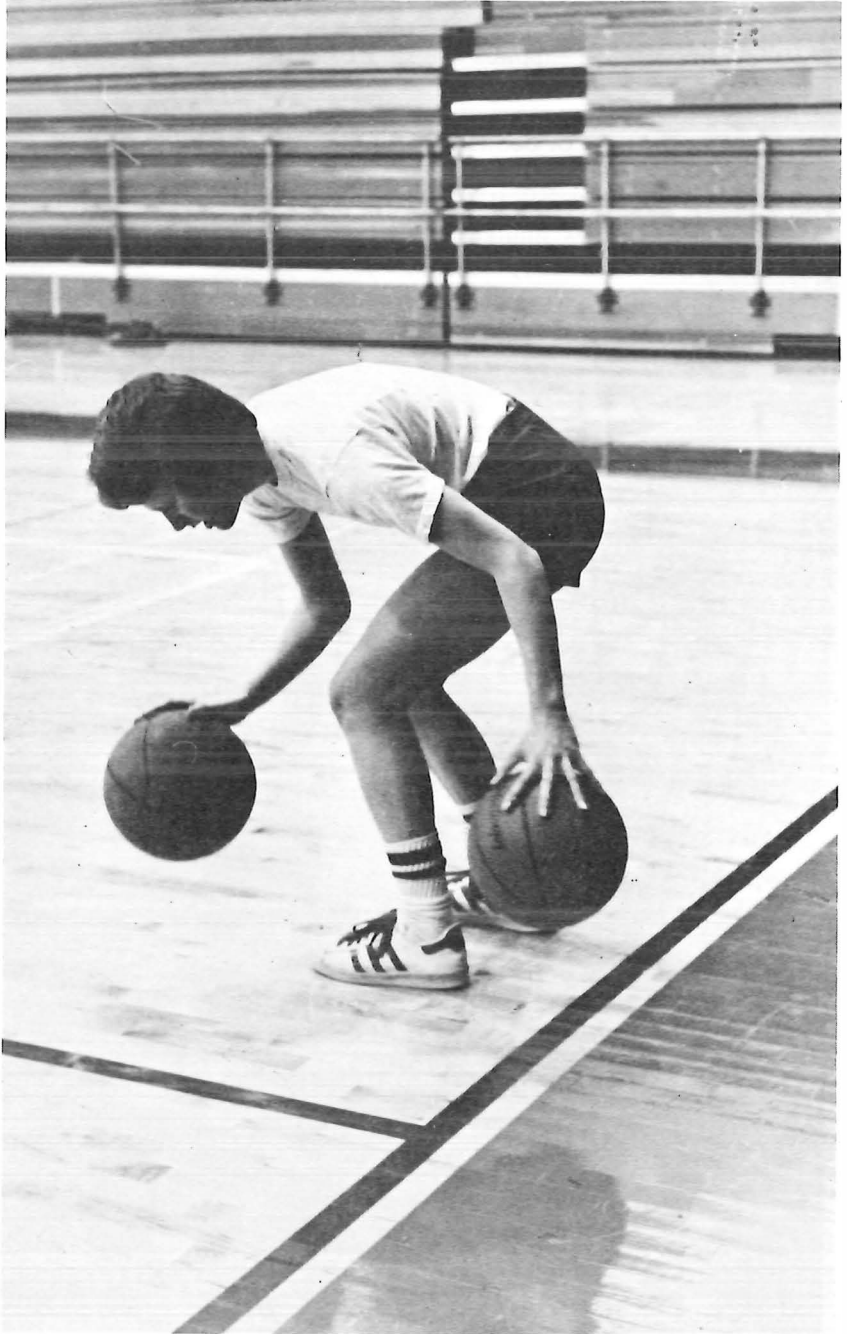
Refunds are calculated from the date of the official notification by the student to the Office of Admissions and Records that he is withdrawing. Students failing to notify the Office of Admissions and Records of withdrawal will forfeit all rights to a refund.

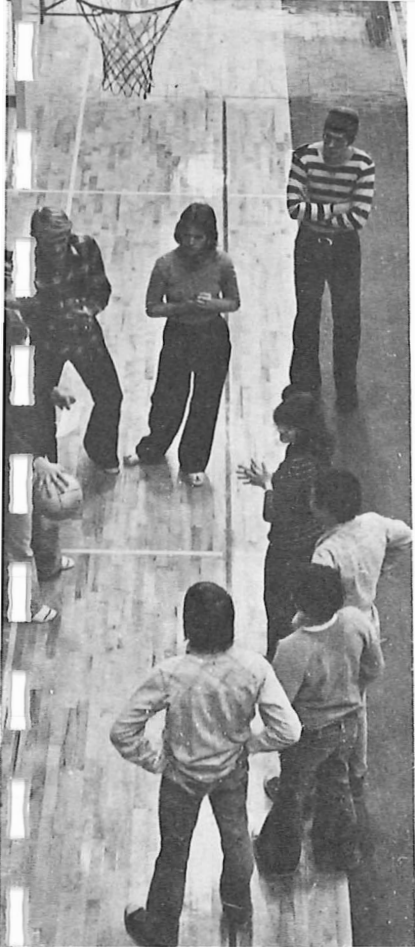
BOOKS AND SUPPLIES

The cost of books and supplies will vary from one program to another. The College Bookstore sells both new and used books. Students are encouraged to take advantage of savings which result when purchasing used books. The cost of books and supplies will probably range from \$35-\$70 per quarter.

The College Bookstore will buy back used books in good usable condition in quantities limited to the anticipated needs for ensuing quarters. Book buy back periods are announced at the end of each quarter.







Admissions
Student Services
Activities



Admissions

ADMISSIONS AND RECORDS

Roane State Community College subscribes to the "open-door" policy for admission. Prospective students seeking admission to complete courses for college credit must meet the following requirements.

ADMISSION REQUIREMENTS

1. Graduate from high school or receive a GED high school equivalency diploma and file with the Office of Admissions an official high school transcript or an official copy of GED scores.
2. File an application for admission and submit a non-refundable application fee of \$5.00. The application form must have all appropriate spaces completed.
3. File the signed Health Information Report and/or evidence of a recent physical examination. Students who have special health problems must file this information with the college clinic. Part-time students shall have the option of signing the medical waiver, and students who enroll only in courses taught at off-campus locations are exempt from any health information requirement.
4. All freshmen applicants are strongly urged to take the American College Testing Program (ACT) battery and have their scores certified directly to the Admissions and Records Office, Roane State Community College, Harriman, Tennessee 37748. This test should be taken preferably on one of the fall testing dates during the senior year of high school. Information on the ACT may be obtained from the high school counselor, the Counseling Office at RSCC or by writing to American College Testing Inc., P.O. Box 168, Iowa City, Iowa 52242. Roane State Community College's ACT Code Number is 3985. This number should be used when requesting that scores be sent to RSCC. Students may enter without having taken the ACT, but they may be required to take the ACT battery during their first quarter of attendance. The sole purpose of these tests is to assist the student in choosing the best academic schedule.
5. Applicants who have not completed one year of American History in high school must agree to take 9 quarter hours of American History their first year at Roane State.

TRANSFER STUDENTS FROM OTHER COLLEGES AND UNIVERSITIES

1. Degree seeking applicants who have attended another college or university will be considered a transfer student and will be required

to furnish transcripts of all previous college work from each institution he/she has attended.

2. Transcripts are not accepted from students. A certified copy must be mailed directly to the Office of Admissions, Roane State Community College.
3. Transfer students will be admitted if they meet the minimum scholastic standards required by the College. Special cases will be evaluated by the Admissions Office.
4. In special cases an applicant who wishes to transfer to Roane State Community College may be allowed to register prior to the receipt of official transcripts. It is mandatory, however, that all transcripts be received during the first quarter of enrollment. No student may register for a second term if the admissions file is not complete.
5. Credits for courses not corresponding with the curriculum at Roane State will be entered on the transcript as elective credit.
6. If a transfer student has accumulated less than 36 quarter hours, an official high school transcript is also required.
7. Freshmen transfer students must furnish the college with certified ACT scores. If the transfer student has not taken the ACT, then he may be required to take the ACT battery during his first quarter of attendance at Roane State Community College.

When all requirements have been met, the applicant may be admitted to the College as a candidate for a degree and receive college credit for courses completed.

HOW TO APPLY FOR ADMISSION

All correspondence concerning admissions should be addressed to:

Director of Admissions and Records
Roane State Community College
Harriman, Tennessee 37748

A candidate for admission should request application blanks early enough to allow ample time for required materials to be forwarded to the Director of Admissions and Records.

When all admission papers have been received in the Office of Admissions and Records, the applicant will be sent a letter indicating that he has been accepted for admission, or he will be advised by letter that further action is necessary in order to establish eligibility for admission. Applicants will be advised when to appear for testing, counseling, pre-registration and registration.

READMISSION OF FORMER STUDENTS

Former students who wish to return to the College after an absence of one quarter or more must file a formal application for readmission.

Application forms, available from the Office of Admissions and Records, must be completed in ink or by typewriter and returned to the Director of Admissions and Records. If the student has enrolled at another college since last attending Roane State Community College, he must have a transcript from the other college submitted and approved before he may reenter. Applications will receive favorable consideration only if the applicant is eligible for readmission under all college regulations.

CLASSIFICATION

For administration purposes, a student will be classified as a freshman until the completion of 42 quarter hours; a student who has completed 42 quarter hours or more will be classified as a sophomore. Those not accepted as Degree Students will be classified as Special Students.

Special Student—Credit

Persons desiring college credit, but who are not working toward a degree at Roane State Community College, may be admitted as special students. These Students must submit an application form, the required medical form, and evidence of high school graduation or a GED diploma. If such students have already earned a degree, or have completed some work toward a degree at another institution of higher education, a college transcript in lieu of the high school transcript or GED diploma may fulfill this requirement.

Special Student—Non-Credit

Persons desiring to take courses offered in the College program for audit, or who do not meet all of the admission requirements, will be admitted as Special Students. Students seeking admission to the College for the purpose of attending special courses, seminars, or other non-credit offerings will be admitted as Special Students.

Transfer Student

Admission as a transfer student will be based upon the student's high school record and his success in college. Critical consideration will be given to the conditions under which he is withdrawing or has withdrawn from another institution. Normally, transfer students will be admitted who can show evidence of honorable withdrawal or dismissal. These students must be eligible for readmission at the institution or be recommended for admission by the institution where they matriculated. Special cases will be evaluated by the Admissions Office.

Transfer students who are residents of Tennessee will be given first consideration. Out-of-state transfer students will be considered if space is available. The conditions resulting in their request for transfer will be studied and recommendation made by the appropriate committee.

Transient Student

The person seeking to be admitted as a transient student must complete the application form for transient students. The transient application is in addition to the regular form. The form contains a provision for written approval and prior commitment from the student's college to accept the credit earned at Roane State Community College.

Special Student—Adult

A student who has passed his twenty-first birthday and who does not meet requirements for a regular student may be admitted as an adult-special student subject to the following guidelines:

1. The applicant must submit an application for admission and a five dollar application fee.
2. The applicant may not enroll as a full-time student.
3. The applicant may not accumulate more than 24 hours of credit while enrolled as an adult-special student.
4. After 24 quarter hours have been attempted, if the student has a 2.00 GPA or better, the student may apply to the Director of Admissions for reclassification as a regular degree student. If the reclassification request is granted, up to 24 hours of credit may be applied toward a degree program at Roane State Community College. If, after attempting 24 credit hours, the adult-special student does not have a 2.00 average, the student may not enroll in additional courses until the GED test has been successfully completed.
5. If the student applies for reclassification to a regular degree student prior to the successful completion of 24 quarter hours (2.00 GPA or better), the student must submit evidence of high school graduation or successful GED scores (a composite score of 45 or better).

An adult who presents evidence of having passed his sixtieth birthday will be admitted as an adult-special student subject to the following guidelines:

1. The applicant must submit a completed application form and a five dollar application fee.
2. The student may be permitted to enroll in courses on an audit basis when class space permits. No course fees are required for Tennessee residents under these circumstances.
3. Regular fees must be paid for all community service courses.

Foreign Student

An applicant who is not a citizen of the United States is classified as a foreign student. Those applicants whose native language is not English shall, in addition to the requirements for a regular student, submit TOEFL scores and evidence of capability of paying all college and living expenses for one year.

ADMISSION WITH ADVANCED STANDING**Advanced Placement**

Under certain conditions advanced placement may be granted. Roane State Community College may grant advanced placement and credit for courses in which the student has demonstrated satisfactory achievement. Each applicant under this plan is to show satisfactory achievement on the College Level Examination Program (CLEP). CLEP scores may be accepted for departmental credit where applicable on a pass/fail basis, using the CLEP Center's recommended cut off scores. Credit earned through the College Level Examination Program is posted on the student's permanent academic record. Students must register for any course for which credit is granted as a result of departmental proficiency examination.

These examinations are scored by CEEB and forwarded to the College. Upon receipt of tests showing satisfactory achievement scores, the College may, with the recommendation of the department concerned evaluate the results and grant advanced placement with credit.

Individual Departments may recommend advanced placement based upon the level of achievement attained on departmentally designed examinations together with an evaluation of the student's background.

Advanced placement in foreign language classes will be based upon the student's previous studies. Those who have completed two years of high school language with "C" or better must enroll in the intermediate level of that language. A student may, however, enroll in beginning courses for audit or enroll in the beginning courses of a different language.

Placement in mathematics may be made at a level decided by the Mathematics Department in consultation with the student. Consideration will be given to the student's background in specific courses and available test scores.

All advanced placement must be approved by the Dean of Instruction.

Course Exemption

High School graduates with exceptional scholastic records or those who have been enrolled in high school accelerated or honor sections may apply to take proficiency tests in beginning English, history, mathema-

tics, science, or other subjects where exemption may be justified. Applications to take proficiency tests in one or more of the subject areas must be received in letter form by the Office of Admissions at least four weeks prior to the date specified for registration in the college calendar.

In English, students making 25 or better on the ACT test may sign up for both English 1010 and 1020, attend English 1020, and receive six hours credit with the grade earned in English 1020.

All course exemption requests must be approved by the Dean of Instruction.

TRANSFER OF CREDIT

Roane State Community College will accept credits transferred from accredited colleges. Certified transcripts of all previous records must be sent to the College at the time of application. Credits for courses not corresponding with the curriculum at Roane State Community College will be entered on the transcript as elective credits. Credit from an institution of higher education which is not fully accredited may be accepted provisionally if the institution is in the process of attaining accreditation.

No academic credit may be transferred to Roane State Community College from a non-accredited institution (an acceptable accrediting agency for an institution would be the Southern Association of Colleges and Schools).

Transfer grades have no bearing on the required average for graduation.

Veteran students who have more than one year of honorable military service may be awarded up to six hours of physical education activity credit and up to nine hours of Military Science credit. The Veteran must present a copy of the DD 214 Form (if not on file) to the Office of Admissions and Records and file a petition for this credit.

CORRESPONDENCE AND EXTENSION CREDIT

A student may not be enrolled at another college for correspondence or extension work while enrolled at Roane State unless special permission has been granted. All extension or correspondence work in progress upon admission must be reported to the Office of Admissions and Records at the time of the student's first registration. A maximum of 25 quarter hours correspondence and/or extension work may be applied toward degree credit. All correspondence or extension work must have the documented approval of the Director of Admissions and Records.

ADMISSION TO SPECIAL PROGRAMS

Admission to some programs requires additional testing and counseling. The requirements may be found in the catalog section dealing with program descriptions.

ENTRANCE PLACEMENT

The placement of a student in any given college level course will depend upon his having met certain prerequisites for the particular course. Prerequisites for any given course will be established on the basis of achievement in high school courses, the achievement on the related section of the ACT test, the College Level Examination Program (CLEP), and/or achievement on other tests administered by the College during registration procedures for applicants. The placement procedures are designed to help guide the enrolling student into courses commensurate with his ability. Students who fail to achieve the required level of proficiency in high school courses, and/or tests, will be required to enroll in appropriate courses. Other students may elect to take any Developmental Studies Program course. The Developmental Studies Program includes reading improvement, communications, mathematics, science, and study skills.

RECORDS

Records of each student's grades are kept on permanent file in the Office of Admissions and Records. Since these records are permanent and are frequently referred to for the purpose of supplying information to legitimate sources, each student should be acutely conscious that he is building his future and that his good attitude and diligent study will stand him in good stead after graduation.

In all cases, student admission files must be complete prior to the end of the first quarter of enrollment. No student will receive grades or be permitted to reenroll until all necessary documents are received in the Office of Admissions and Records.

TRANSCRIPT OF CREDITS

In all cases, obligations to the College must be fulfilled before a transcript will be issued.

CANCELLATION OF SCHEDULED CLASSES

Any scheduled class may be discontinued by the College. The right is reserved to cancel when the number enrolled is deemed insufficient.

ADVANCED STUDIES

(for seniors in high school)

Upon completion of the junior year in high school a student may enroll in courses under the Advanced Studies plan. Conditions of this plan are as follows:

1. The student must have a cumulative average of "B" or above or rank in the upper 25% of the class, and the student must be nominated by the high school principal and/or counselor.

2. The course load may not exceed 10 quarter hours except in cases where a sequence may be 12 quarter hours.

Exceptions to the above policy must be approved by the high school principal concerned and the Dean of Instruction at Roane State Community College.

Courses satisfactorily completed will count as credit for those who submit a high school transcript showing evidence of high school graduation.

Exceptionally qualified students may continue in advanced studies during their senior year of high school if recommended by the high school principal. Courses for such students should be selected by the College, and the student given released time from the high school to attend classes of the College.

PROBATION AND RETENTION STANDARDS

A minimum quality point average of 2.00 is required for graduation from Roane State Community College.

Academic Deficiency

A student will be notified of academic deficiency if after attempting 24 hours at Roane State Community College that student's cumulative GPA is less than 1.5. A student having attempted 60 hours or more at Roane State Community College must maintain a cumulative GPA of 1.75 to avoid academic deficiency status.

Academic Suspension

After one quarter on academic deficiency a student who does not show improvement in his GPA may be placed on academic suspension for one quarter.

Any student who is placed on academic suspension will be notified by the Admissions Office. Any student has the right to appeal to the Admissions and Retentions Committee (composed of faculty, staff, and student representatives) for reinstatement. The student should notify the Admissions Office if he/she wishes to process an appeal.

Grounds for Dismissal

A student may be dismissed from the College for any one or more of the following reasons:

1. Failure to meet minimum academic standards as stated in the above section.
2. Conduct of an unacceptable nature (see student handbook).

WITHDRAWALS AND HONORABLE DISMISSALS

Students finding it necessary to withdraw from the College should do so officially to maintain good standing and to assure readmission or honorable dismissal. Withdrawal procedures are as follows:

1. Initiate form in Admissions and Records Office.
2. Secure clearance signatures (in sequence) from (1) Adviser (2) Instructor of any laboratory science course from which a student is withdrawing (3) Library (4) Admissions Office and (5) Business Office.
3. Return forms to Admissions Office.

After the drop deadline date, no student will be permitted to withdraw from the College and receive the grade of "W" unless documented proof of one of the following conditions exists:

1. Illness or injury of the student as verified by the RSCC student health service or the attending physician.
2. Serious personal problems as verified in writing by the student's parents, spouse, minister or physician.
3. Necessary change in work schedule verified in writing by the student's employer.
4. New employment as verified in writing by the employer.

All equipment belonging to the College must be accounted for or paid for and all financial obligations met. If it is impossible for the student to take these steps in person, they should be taken by a parent or a person acting as an agent for the student. The student may withdraw from the College with the grade of "W" through the dates specified on pages 3 and 4 with the grade of "W." Withdrawal after this date, must be approved by the Dean of Instruction. A student who stops attending classes and fails to follow the proper withdrawal procedure will be carried on the roll until the end of the quarter and a grade of "F" assigned.

REGISTRATION FOR COURSES

A student whose application is filed before the application deadline for any given quarter should, prior to registration, receive notification of registration procedures. The student will be assigned an adviser who will continue to assist with his education program. Students are expected to complete registration on the dates announced. They must observe the procedure specified at the time. The student is not officially enrolled until he has completed all the requirements of registration. Registration after dates established on the calendar may be completed by presenting an acceptable reason for delay and by payment of the late registration fee. Registration delayed beyond the period established as the last date to register or add a class requires special permission from

the Dean of Instruction and may result in reduction of course load for the quarter.

CHANGE OF REGISTRATION

A student is allowed to change registration during the "Drop-Add" period at the beginning of each quarter. The following procedures are to be followed in adding or dropping courses:

1. Prepare a schedule adjustment form from the Admissions and Records Office.
2. Obtain adviser's signature.
3. Present the completed form to the Business Office and pay appropriate fees.
4. Return two (2) copies of form to the Admissions and Records Office and receive one copy which must be shown to the instructor whose course is being added.

Failure to follow these procedures will result in an "F" in a course the student did not attend or the student taking a course without receiving credit.

SOCIAL SECURITY ADMINISTRATION

The Admissions and Records Office cooperates with the Social Security Administration by certifying that students eligible to receive Social Security benefits are enrolled at Roane State.

VETERANS AFFAIRS

Roane State Community College cooperates with the Veterans Administration in providing educational opportunities for veterans. The Veterans Affairs Coordinator at Roane State is available for help in determining eligibility, selection of a major, preparing the required forms for VA benefits, or any other matters pertaining to college attendance under the "G.I. Bill." Veterans who have not completed high school or who do not have a high school equivalency diploma should contact the Veterans Affairs Coordinator for help in planning their program of study for admission to Roane State.

Veterans desiring to attend Roane State under any of the educational assistance laws administered by the Veterans Administration should contact:

Veterans Affairs Coordinator
Room C-9
Roane State Community College
Harriman, TN 37748, or

Veterans Administration Regional Office
110 9th Avenue South
Nashville, TN 37203

Once enrolled, veterans and other eligible persons should maintain close contact with the Veterans Affairs Office. Information is frequently received from the Veterans Administration which is important for personal and educational plans.

Veterans and other eligible persons are eligible to receive educational benefits under Title 38, U.S.C., (The "G.I. Bill") only when classified as a regular degree student or adult special student. Other classifications, i.e., special student-credit and special student-non-credit (see pages 30 and 31), are not qualifying.

Only those courses which count toward the veteran's declared major may be claimed for pay. A claim form for such courses must be completed each quarter and filed with the Veterans Affairs Office.

Current Veterans Administration regulations require that Veterans placed on academic probation must attain a GPA of 1.5, or higher, the first quarter of enrollment following the quarter of academic deficiency, if he has attempted 24-59 hours. If he has attempted 60 hours or more at Roane State, he must attain a GPA of 1.75, or higher, at the end of the first quarter of enrollment following the quarter of academic probation. In any case, the average must be sufficiently high, and must be maintained, to allow graduation without an undue extension of training time. Veterans placed on academic suspension may be required by the Veterans Administration to undergo counseling before educational benefits are reinstated.

Courses for which the veteran and other eligible persons have received a passing grade, either at Roane State or transferred from another institution, may not be claimed for pay the second time. Courses in which the veteran and other eligible persons receive a grade of "F" may be repeated and claimed for pay.

Elective hours beyond those allowed by the curriculum of the declared major may not be claimed for pay.

Educational benefits will be terminated for those courses in which the veteran and other eligible persons have excessive, unexcused absences. This does not affect the right of the student to continue attending the course, provided he has been properly enrolled.

Veterans and other eligible persons desiring educational benefits under the "G.I. Bill" must file a claim form with the Veterans Affairs Office at the time of pre-registration each quarter.

Course substitution must be processed and approved as described on page 52 before a course is claimed for payment. Further information is available from the Veterans Affairs Office.

GED TEST

Adults who have not received a high school diploma and wish to apply for a certificate of equivalency may take the General Educational

Development Test at Roane State Community College, which has been established as an official center for this test. A counselor will explain requirements for taking the test and will assist applicants in the preparation of necessary application forms.

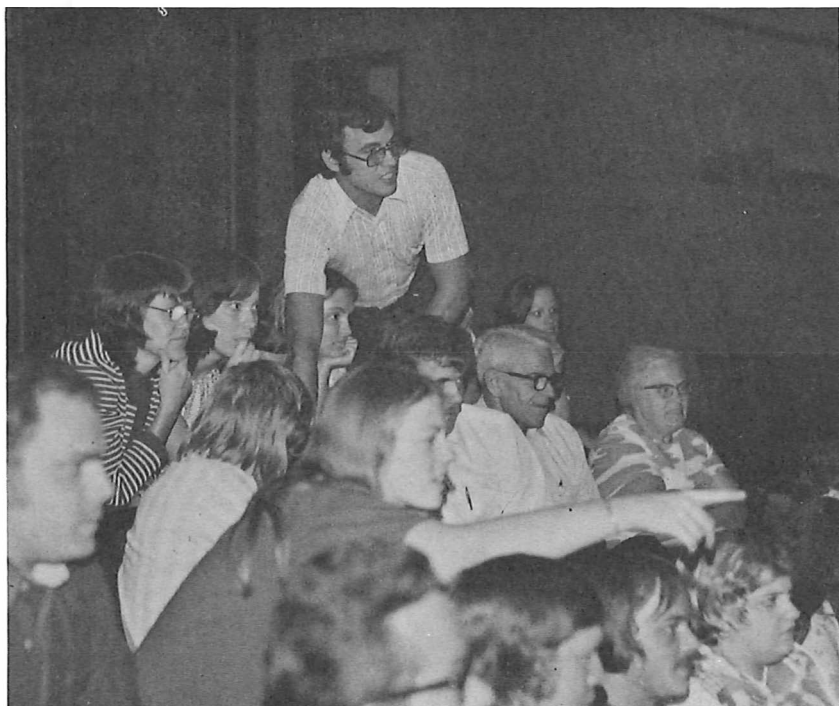
Satisfactory scores on the test enable the person to apply to his high school for an equivalency diploma. Persons who feel inadequately prepared to take the GED test can obtain assistance by taking a course entitled GED Preparation for High School Equivalency Diploma at the college.

ACT TEST

Roane State Community College serves as an area test center of The American College Testing Program (ACT). Tests are given on each of the national testing dates.

CLEP CENTER

The College-Level Examination Program (CLEP) gives students the opportunity to obtain college credit by examination. For information concerning the CLEP Center at Roane State, contact the Counseling Center.



Student Services

Student Services comprise all the non-instructional services which Roane State Community College provides for its students. These services include academic, social, vocational and personal counseling, as well as financial aid, health services, and transfer assistance.

ORIENTATION FOR STUDENTS

All new students meet at the time indicated on the calendar for the orientation program. One purpose of orientation is to introduce students to administrative officers and other student leaders. Another purpose is to help acquaint students with the campus and its facilities. The orientation activities are coordinated by the Student Personnel Services Office and are executed with the assistance of faculty members and Student Government Personnel.

COUNSELING AND TESTING CENTER

The Counseling Center was established to aid students in successfully completing their college work and establishing good foundations for future growth. The Center is staffed by professionally trained counselors who provide services for a wide range of problems—educational, vocational and personal.

Confidentiality of counseling visits is assured so that students may feel free to discuss their concerns. Counselors also provide opportunities for students to develop interpersonal skills and to become more self-actualized using individual counseling, small group techniques, and courses in Human Development.

Situations which cause students undue concern may disrupt their interpersonal relations and affect academic achievement. The Counseling Center provides the assistance and atmosphere to work through these problems.

Counseling may include aptitude, interest, achievement or personality tests as requested by the student. The Counseling Staff may also assist the student in securing services outside the College.

A collection of occupational information materials and catalogs from various institutions is available in the Center for student use.

PLACEMENT SERVICE

The Placement Office provides assistance in securing positions for students and graduates of RSCC and maintains contact with alumni, business and industrial clients.

Candidates for a degree are required to file a personal data sheet with the Placement Office prior to graduation. It is recommended that this be

completed at the time an Intent to Graduate form is filed with the Office of Admissions and Records.

The Placement Office also aids students in finding full-time, part-time, or summer employment. Students who are seeking employment are encouraged to visit the office which is located in the Student Personnel Offices.

HEALTH SERVICES

The health and safety of students is a concern of the Student Personnel Services Office, and the requirement of a health examination prior to entrance is enforced. A clinic is maintained for student use in case of illness or accident occurring during the school day. A registered nurse is in charge to administer first aid and palliative treatment in minor illnesses. A local physician, designated as the College Doctor, will be available for major problems. Since the College does not collect a medical fee, each student is responsible for his medical bills. Appointments with the director of the clinic can be made for interviews concerning special health problems. Instruction in personal health is given in appropriate health courses.

STUDENT ACCIDENT AND SICKNESS INSURANCE PLAN

This plan provides protection 24 hours per day during the term of the policy for each student insured. Students are covered on and off campus, at home, and while traveling between home and school during interim vacation periods. Coverage is extended to provide up to 48 hours of actual travel time while enroute between home and school prior to the opening of school.

Application and claim forms may be obtained in the office of the Dean of Student Personnel Services.

TRAFFIC REGULATIONS

Registration of vehicles. All motor vehicles operating on the Roane State Community College campus must be properly registered. Vehicle registration should be completed during the process of academic registration and the sticker procured prior to payment of fees. This campus sticker must be displayed in the manner prescribed in the instructions given each registrant. If late registration is necessary, details may be obtained from the Office of the Dean of Students.

Detailed regulations are contained in the "Student Handbook." It shall be the student's responsibility to familiarize himself with these regulations and to abide by them.

HOUSING

Under State Board of Regents policy, Roane State Community College assumes no responsibility for student housing. This institution is primarily a commuting college and has no dormitories, fraternity or sorority houses. The local news media and real estate agencies are able to provide comprehensive listings of rental housing available. Individual students are responsible for making arrangements to rent these facilities from owners or their agents.

Students are required to register local addresses in the Admissions and Records Office for location purposes. Any change of address must be reported to the Admissions and Records Office. Failure to report a change of address subjects the student to disciplinary action.

SOCIAL RETENTION STANDARDS

A student who fails to conduct himself in an acceptable way may receive disciplinary dismissal; or, if the proper committee sees fit, he may be placed on disciplinary probation for an indefinite period of not less than one quarter. A student on disciplinary probation must meet stated requirements of his probation and be again reviewed by the committee before being removed from disciplinary probation standing.

STUDENT FINANCIAL AID

The Student Financial Aid Program at Roane State Community College is designed to aid students who would find it difficult or impossible to attend college without financial assistance. Roane State offers a comprehensive program of financial aid in the form of scholarships, part-time employment, grants and loans. Major emphasis is placed upon financial need, academic achievement, character and promise of future success.

When determining financial need the evaluating committee will consider all the financial resources of the student and the family as well as any special problems. Although the College will assist all qualified students as resources permit, this aid should be viewed only as supplementary to the efforts of the family and student.

SCHOLARSHIPS

State Board Work Scholarships

State Board Work Scholarships are authorized by the Tennessee State Board of Regents, the governing body of the state community colleges. These scholarships pay the registration fee for the academic year and are awarded on the basis of scholastic achievement and need. Students ranking in the upper 5% of their high school graduating class will be

given priority in awarding these scholarships. Students ranking in the upper 25% of their graduating class are eligible to apply. Recipients of scholarships as freshmen may qualify annually for renewal provided they maintain a grade point average of 2.8 for the academic year.

Since state funds are used for State Board Scholarships, recipients are required to work four hours per week. In general, students are given work assignments related to their major academic interest.

Only residents of Tennessee are eligible for the State Board Work Scholarships. Applications should be submitted after the close of the first semester of the senior year of high school and before the following June 1.

Private Scholarships

Roane State has established a limited number of private scholarships. In selecting recipients for these scholarships, emphasis is placed on scholastic achievement, character, future promise and financial need.

These scholarships are:

Roane State Community College Academic/Leadership Scholarships
American Contract Bridge League Scholarship (Tennessee Valley Unit 165)

Kingston Lions Club Optometry Scholarship

Rockwood Business & Professional Women's Club

Mrs. Joe Bernard Memorial Scholarship

Roane County Council of Home Demonstration Clubs Scholarship

Phil Resseguie Memorial Scholarship

Roane State Veterans Club Scholarship

Additional scholarships will be established as interested groups and individuals make arrangements with the College. Individuals or groups interested in establishing a scholarship fund are advised to contact the Director of Student Financial Aid.

Athletic Scholarships

The College annually awards a number of athletic scholarships. For detailed information contact the Director of Athletics.

Army ROTC Scholarships

The Army ROTC Scholarship program offers financial assistance to outstanding young men and women in the ARMY ROTC program who are interested in the Army as a career. Each scholarship provides for free tuition, textbooks, and laboratory fees in addition to a subsistence allowance of \$100 per month for the period that the scholarship is in effect. Scholarships may be awarded for either one, two, three or four years. High school seniors should contact their guidance counselors

early in November or December of their senior year to apply for the four-year scholarship. One, two and three year scholarship applicants should contact the Director of Student Financial Aid or the ROTC Instructor for further information. Certain other privately financed scholarships and grants are available to ROTC cadets.

GRANTS

Basic Educational Opportunity Grants

This is a direct grant (no repayment or work requirement) from the federal government based primarily on the family's financial situation. The amount of the grant ranges between \$226 and \$888 for the school year and may be used for expenses related to attending Roane State. Such expenses include fees, books, transportation, room and board, and other related expenses.

Application forms are available from the College or from high school guidance offices.

Supplemental Educational Opportunity Grants

Federal funds are available to colleges and universities for the purpose of providing grant assistance to undergraduate students of exceptional financial need who would not, except for the grant, be financially able to attend college.

Supplemental Educational Opportunity Grants must be matched in equal amounts by other financial aid provided by the college. The grant will be matched with other scholarship aid, loans, or student employment.

Applicants for Supplemental Educational Opportunity Grants must be enrolled or accepted for enrollment and show evidence of academic or creative promise and capability of maintaining good standing.

Grants may be renewed from year to year for the first four years of undergraduate study provided the student continues to make satisfactory academic progress. All students who apply for financial assistance are automatically considered to determine if they meet the requirements to receive a Supplemental Educational Opportunity Grant.

Tennessee Tuition Grants

In 1971, the Tennessee Student Assistance Corporation was created to administer the Tennessee Tuition Grant Program.

Under this program, Tennessee residents who need financial assistance may receive a grant to cover tuition and fees at the college of their choice in the State.

Application forms may be obtained from high school guidance offices, college financial aid offices, or by contacting:

Tennessee Student Assistance Corporation
707 Main Street
Nashville, TN 37206

LOANS

National Direct Student Loans

National Direct Student Loans, previously known as National Defense Student Loans, are available to students through funds provided jointly by Roane State Community College and the Federal Government.

These are long-term, low-interest loans on which repayment does not begin and interest does not accrue while the borrower is enrolled as a student, on at least a one-half time basis, at a college or university. Repayment of principal and 3% annual interest begins 12 months after the student leaves college.

There are cancellation provisions of the National Direct Student Loan under which a student may have up to the total amount of the loan cancelled by teaching in special education, in certain schools with a high enrollment of students from low-income families or in Head Start programs.

Federally Insured Student Loans

Under this program, sponsored jointly by the Federal Government and the State of Tennessee, a Tennessee resident may receive long-term, low-interest loans from a participating bank or other lending institution to apply toward expenses related to education.

Repayment, at 7% simple interest, begins 12 months after graduation or withdrawal from school. During school, the interest is paid by the federal government if the family's annual adjusted gross income is less than \$15,000.

Loans are usually made by the student's hometown bank. For application forms and information concerning the names of lending institutions which participate in the program, contact the Financial Aid Office of the College or the Tennessee Student Assistance Corporation, 707 Main Street, Nashville, TN 37206.

RSCC Short-Term Loans

Under this program, a student may borrow up to \$40 for unexpected kinds of expenses to be repaid within 30, 60, or 90 days.

PART-TIME EMPLOYMENT

College Work-Study Program

Under the College Work-Study Program, funded jointly by College and Federal Government funds, students may work on a part-time basis in order to help finance their education.

Students who qualify for participation in this program may work up to 15 hours per week during the academic year and up to 40 hours per week during holiday or vacation periods, at a minimum of \$2.30 per hour.

Types of employment cover work opportunities in areas such as the library, laboratories, maintenance, faculty and administrative offices. Opportunities are also available off-campus in schools, hospitals, recreational facilities and other non-profit organizations.

Other Employment Opportunities

The College maintains contact with a number of businesses and industries in the area for the purpose of assisting students in locating part-time employment outside the College Work-Study Program.

HOW TO APPLY FOR FINANCIAL AID

All federal financial aid programs require the assessment of financial need, which is based on the parental ability to contribute toward educational expenses. In addition to the College's application, a student should complete either the Parents' Confidential Statement of College Scholarship Service or the Family Financial Statement of the American College Testing Program. These two forms are available from the College or from high school guidance offices. Students should also obtain the application for the Tennessee Tuition Grant and the Basic Educational Opportunity Grant from the College or from high school guidance offices.

June 1st is the priority date for applying for aid. After this date money will be awarded on a first come, first served basis as long as there is money available. A student must be fully admitted to the College before aid will be awarded.

Information regarding student financial aid may be obtained by contacting the Student Financial Aid Office. Renewal of aid is not automatic. Each student must file a new application each year.

Activities

STUDENT ORGANIZATIONS AND ACTIVITIES

A well-rounded, integrated program of student activities is provided through student organizations. Students may choose from a variety of organizations depending upon their individual interests. These organizations include scholastic honoraries, departmental groups, service organizations, and special interest groups.

FINE ARTS

Concerts, lectures and special cultural events are sponsored by the College and the community for the enrichment of the college and community.

COLLEGE PUBLICATIONS

A college newspaper will be published during the college year and will be under the advisement of the College Publications Committee, with a faculty advisor working closely with the staff of the newspaper. The Publications Committee will select the Editor and Assistant Editor from applicants desiring to work in those positions.

CLUBS

BSU—To promote interfaith as a way of life among college students. To provide a ministry to individuals in the campus community who have need for a personal relationship with Jesus Christ or who have a need for Christian growth.

CHESS CLUB—To meet together in friendship to play chess.

DRAMA CLUB—Objective is to present plays at Roane State

FORENSIC CLUB—Objective is to promote competition in areas of debate, impromptu, extemporaneous, and after dinner speaking.

LITERARY CLUB—Objective is to organize and help finance a literary magazine and to promote interest in the literary efforts of the students of Roane State and the surrounding community.

VETERANS CLUB—To provide a means whereby veterans can meet for social purposes and keep abreast of current legislation and regulations affecting veterans' educational benefits, and especially to provide a means for veterans to continue serving their college, community and nation.

STUDENT GOVERNMENT ASSOCIATION—Objective of SGA will be to provide opportunities for students to offer constructive opinions, thereby promoting cooperation among students, faculty and administration and working for the common good of Roane State.

ROTARACT CLUB—To develop leadership among members and provide services to the college and community.

INTRAMURAL PROGRAM

The department of Physical Education conducts a program of activities to provide each student an opportunity to participate in organized individual and team activities. An individual's playing ability is not considered as important as his desire to enter into the true spirit of competition and good sportsmanship.

The intramural program includes such activities as volleyball, badminton, basketball, tennis, softball, bowling, jogging, and flag football.

In order to be eligible each participant must (1) be a bonafide student at RSCC, faculty, or staff; (2) not be a member of a varsity, freshman, or other team competing inter-collegiately; (3) not be a professional athlete in the sport in which he is participating; (4) must not have won a varsity letter within the last two years at a college in the sport he selects.

ATHLETICS

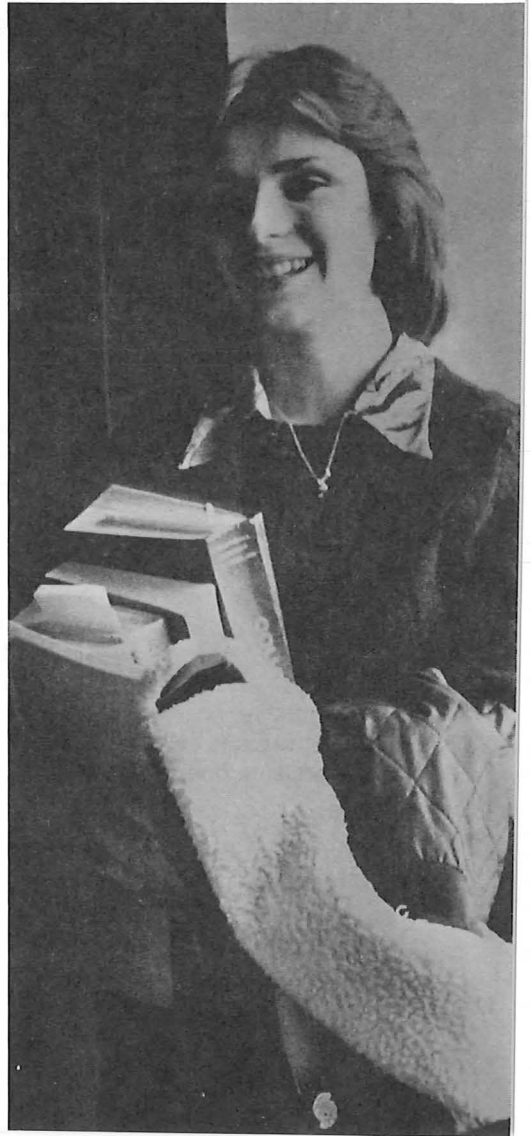
Roane State competes in men's and women's basketball, baseball, golf, and tennis as a member of the Eastern Division Tennessee Junior College Athletic Association.

In order for a student to participate in Athletics, he must meet the eligibility requirements of the National Junior College Athletic Association. Any inquiries about athletics should be directed to the Department of Athletics whose offices are located in the gymnasium.

All RSCC students will be admitted to athletic contests upon presentation of a validated student identification card. Admission to games is \$1.00. Pre-school children are admitted free.



Academic Information



PLANNING AN EDUCATIONAL PROGRAM

The responsibility for selecting an educational program rests with each student. The faculty and counselors at Roane State Community College take pride in assisting the student in program planning and course selection. Each student will be assigned a faculty adviser to assist him in his program of study.

Some students may be required to meet further prerequisites to enter the program they select. In the best interests of the student, admission to a particular curriculum or to specific courses should be based upon evidence which would indicate a fair chance of satisfactory performance in the program or course.

A student who is planning to transfer from Roane State at the conclusion of two years work to a four-year institution should secure a copy of the catalog of the institution selected for use in planning his transfer program.

ATTENDANCE REGULATIONS

1. Attendance of classes and other official appointments is required.
2. An explanation of absences should be given to instructors. This information should be presented in advance if possible.
3. Absences are counted from the first scheduled meeting of the class.

IMPORTANT: Non-attendance does not constitute a withdrawal from classes or from the College. Procedures to follow to formally drop a course (see page 00) or to withdraw from the College (see page 00) must be followed. **IT MAY PREVENT YOUR RECEIVING AN UNDESIRE "F" ON YOUR TRANSCRIPT.**

STUDENT LOAD

The average quarter hour load for a student should be 16 quarter hours of credit per term. Individual programs may require more or fewer quarter hours load for a particular term. The maximum load is 18 quarter hours of credit. Any student desiring to take more than 18 quarter hours of credit must make application to the Dean of Instruction and be approved prior to registration. A full-time student is one who is carrying 12 or more quarter hours of credit.

GRADING SYSTEM

The following grading system is used at Roane State Community College:

Grade	Quality Points Awarded Per Quarter Hour
A Outstanding	4
B Above Average	3
C Average	2
D Passing but below average	1
F Failing	0

The scholastic standing of a student is expressed in terms of quality point ratio. A quality point ratio is the total number of quality points divided by the total number of quarter hours attempted, less the number of hours repeated. To meet degree requirements a student must maintain an over-all quality point average of 2.00.

Other markings which may appear on the grade report and/or transcript are as follows:

I	Incomplete
N	Audit: no grade or credit
NC	No credit—no grade
P	In special cases, a grade of Pass may be used
R	Repeated
W	Withdraw
X	No grade reported

The grade "I" indicates that the student was passing at the end of the quarter but has not completed all the work of the course as required by the instructor. The student is thus on notice that he should contact the instructor immediately in an effort to complete course requirements. This "incomplete" must be removed during the succeeding quarter. Courses attempted which are incomplete are reflected on the academic record as hours attempted for which there is no credit established. This in turn affects the quality point average in the same manner as a failing grade. Should the "incomplete" not be removed, the quality point average will continue to reflect the "I" as a failing mark and will be interpreted as such.

At the discretion of the Dean of Instruction, selected courses may be offered using a pass-fail grading system. A "P" indicates a passing grade in such cases. Students would receive 2.00 quality points per credit hour for a "P" and no quality points for an "F." In all cases, the student would have the option of being graded by pass-fail, or the standard "A, B, C, D, F" method.

Repeated Courses

A student may repeat a course upon approval of his faculty adviser. The grade received in repeating the course supersedes all previous grades and is credited in the quarter in which the course is repeated.

In order that grade point averages may be adjusted appropriately, the student repeating a course must file the course repeat form with the Office of Admissions and Records.

Veterans or other eligible persons repeating courses for which they have a passing grade (D or higher) and for which they have been paid are cautioned not to claim this course for pay the second time.

Course Substitutions

Course substitutions require the approval of the student's advisor, the Division Chairperson, and the Dean of Instruction. A form for this approval is available from the advisors and must be processed prior to registering for the course in question.

OBJECTIVES OF THE CURRICULUMS

The two-year programs of study available at Roane State Community College are described in the following pages. The four objectives of the curriculums are: (1) to prepare students for advanced standing in other colleges and universities after successfully pursuing a Roane State Community College program; (2) to prepare students for entrance to certain professional schools whose admission requires one or two years of college experience prior to enrollment; (3) to offer a continuity of courses to give the student an opportunity to explore interests and abilities in several fields of study so that he/she may plan more realistically for the continuation of his/her education; and (4) to prepare students to enter technological areas which require additional education beyond high school.

Students planning to transfer into special programs at senior institutions should work with the faculty adviser, using the appropriate check sheet of the institution to which they will be transferring.

DEGREES OFFERED

Roane State Community College awards the Associate of Arts Degree and the Associate of Science Degree. (A Certificate of Proficiency may be awarded to a student who completes any prescribed program of less than an Associate Degree.)

GENERAL DEGREE REQUIREMENTS

The general requirements for an Associate Degree at Roane State Community College are as follows:

1. Not less than 99 quarter hours of credit.
2. A minimum of 36 of the final 48 quarter hours of course work completed in residence at Roane State Community College.

- 3. A minimum over-all quality point average of 2.00 ("C") on all work attempted at Roane State Community College. In no case may transferred grades be used to raise the student's quality point average on courses taken at Roane State Community College; his/her average on all courses here must be "C" (2.00 or better).
- 4. Completion of specific course requirements as given in outlined Programs of Study. (Substitutions in programs must be approved by the Dean of Instruction.)

CORE CURRICULUMS

The general (transfer education) core curriculum below is for students primarily planning to transfer to senior institutions immediately upon graduation from Roane State Community College. The career education core curriculum below is primarily for students planning immediate employment upon graduation. The minimum expectation for graduation in a particular program is outlined on the following pages of the Degree and Certification Programs section.

The establishment of two core curriculums for Roane State Community College provides flexibility for the "undecided major" student to change course objectives and to redirect his/her academic pursuits without undue penalty and hardship. The two cores are as follows:

GENERAL CORE CURRICULUM

Area of Study	Minimum Quarter Hours Required
English Composition	9
Humanities ¹	12
American History	9
Natural/Physical Science ²	12
Mathematics	3
Physical Education Activities ³	3

¹Any course offered in the Humanities Division.

²Requirement must be met from the same sequence.

³Students completing a majority of their courses in the evening or at off-campus locations may be exempt from the physical education requirement. A petition for exemption must be filed with the Office of Admissions and Records.

CAREER EDUCATION CORE CURRICULUM

Area of Study	Minimum Quarter Hours Required
American History	9
Humanities (To include six hours composition)	9
Physical Education Activities	3

GRADUATION

All students must complete the general requirements as prescribed by the College and specific requirements set forth for the Associate Degree sought. Each student must file an Intention to Graduate form in the Office of Admissions and Records before the beginning of the quarter in which the student expects to graduate.

Graduation exercises are held only at the end of the spring quarter. Students who anticipate completing their work during the current calendar year, whose grade point average is sufficient for graduation, and whose names appear on the official graduation roster, may take part in graduation exercises.

DEFERRED GRADUATION

A student is permitted to graduate under a catalog under which he entered the college or under the catalog in effect at the time of graduation, provided that not more than five years has elapsed in the interim. If more than five years has elapsed, then the student must meet the requirements of the catalog in effect at the time of graduation.

GRADUATION WITH DISTINCTION

Students who have fulfilled all graduation requirements, who have completed a minimum of forty-five quarter hours at Roane State Community College prior to their final quarter, and who have been in residence for a minimum of three quarters prior to their final quarter are eligible for designation as honor graduates. Those who have a quality point average of 3.25 and less than 3.50 will be graduated Cum Laude; those who have a quality point average of 3.50 and less than 3.80 will be graduated Magna Cum Laude; those who have a quality point average of 3.80 or above will be graduated Summa Cum Laude.

A transfer student, in order to be eligible, must have made the required average on all work taken at Roane State Community College and must, in addition, have an over-all average which meets the honors requirements; the final average may in no instance be higher than that made at Roane State Community College. All grades for courses accepted for credit must be averaged in the grade point average to determine the honors graduation eligibility.

DEAN'S LIST

The Dean's List is the official medium for the institution to recognize outstanding academic accomplishment by students. Provision is made for recognizing full-time students who obtain the required quality point average for this honor.

Full-Time—12 Credit Hours or more with 3.25-4.00 average.

LIBRARY

The library serves, primarily, the students and faculty of the college and, secondarily, members of the surrounding communities. In its collection of books, periodicals, microfilm, recordings, and other audio/visual material the library makes available resources to support the curriculum and to provide for recreational reading.

Hours are 7:45 a.m. to 10:00 p.m. Monday through Thursday and 7:45 a.m. to 5:00 p.m. on Friday. Special additional hours will be announced. Members of the library staff are available whenever assistance is needed.

The Library of Congress classification system is used and books are shelved in open stacks for self-service. Books may be checked out for a two-week period with renewal privilege. No fines are charged for overdue books, but all overdue books are subject to recall at any time by the Librarian. Borrowers are responsible for replacement of lost or damaged materials.

Interlibrary loan service is available to all patrons so that material not owned by the Roane State library may be borrowed from another library. Information is available from any member of the library staff.

Gifts to the library are welcomed. However, the library staff reserves the right to (1) evaluate the usefulness of the gift prior to its acceptance, (2) use the gift in any manner that will be most beneficial to the library and (3) at the discretion of the librarian, discard any gift that is no longer useful. The librarian welcomes recommendations on the purchase of new material from both students and faculty.

LEARNING LABORATORY

The main purpose of the Learning Lab is to personalize instruction by providing unique and individualized learning situations for all students. This room contains the latest equipment in audio-visual techniques including tape-recorders, slide viewers, film strip and film loop viewers and computer-assisted instruction. These resources are available for use by all Roane State students, faculty and staff.

The Learning Lab is located in C-225 next to the computer center. Hours are posted on the door each quarter.

DIVISIONS OF INSTRUCTION

Education

Developmental Studies
Education
Health

Physical Education
Reading

Humanities

Art
 English
 Journalism
 Language

Music
 Philosophy
 Speech

Mathematics and Science

Biology
 Chemistry
 General Science

Mathematics
 Physics

Social Science

Geography
 History
 Political Science

Psychology
 Sociology

Career Education

Business and Commerce
 Computer Science
 Cooperative Education
 Dietetics
 Economics
 Electronics
 Engineering
 Fire Science

Hotel-Motel-Restaurant
 Management
 Medical Records
 Military Science
 Police Science
 Recreation
 Secretarial Science
 Technology

CONTINUING EDUCATION PROGRAM

Roane State Community College is dedicated to the philosophy that education is a never-ending process; it continues throughout the lifetime of an individual. Thus, the college makes every effort to offer the advantages of at least part of its total program to every person in the community who can benefit from the experience. Continuing Education includes courses from the five divisions of instruction in the college and is an integral part of the total academic program of the college.

Evening Courses

The evening program at Roane State Community College is more than a separate series of night classes designed for students beyond the traditional college age. The College instead offers a full selection of courses from 8:00 a.m. until 9:15 p.m., enabling students of all ages to schedule classes at times convenient and suitable to their needs. Roane State Community College believes that the resulting association of older students, having a background of work and life experiences, with recent high school graduates is mutually beneficial.

Two full years of college training can be completed during the evening, and the requirements can be met for many of the Associate of Arts or Associate of Science Degrees. Evening students must meet the same degree requirements as those attending day classes (with the exception of physical education, which may be waived under certain conditions). Experienced advisors and counselors are available to those evening students desiring help in planning a degree or a certificate program.

Off-Campus Courses

Roane State Community College also offers both day and evening classes in many locations throughout its service area. Classes are offered in off-campus locations for the benefit and convenience of students in its large service area, giving many students a chance to continue their education who would otherwise be unable to because of time or travel restrictions. These classes are staffed by qualified instructors from the academic divisions of the college and are of equal quality to the same courses on campus. Nearly all courses offered on campus can also be offered off-campus, with the exception of certain courses requiring special equipment. Most of the requirements for many Associate of Arts or Associate of Science Degrees can be completed at off-campus locations. Experienced advisors and counselors are available to off-campus students desiring help in planning a degree or a certificate program.

COMMUNITY SERVICES PROGRAM

In addition to credit courses, special non-credit courses reflecting community interest may be organized at the request of a sufficient number of interested persons. Individuals may pursue these special offerings for personal enrichment, to comply with business or industrial opportunities and/or requirements, for specific technological information and for general cultural benefits. Students taking courses for non-credit are not required to follow the same admissions procedures as those students in degree courses.

The Community Service Program of the college includes a variety of activities which are offered in cooperation with community groups and agencies. The program offerings are in accord with the public's needs and interests and include such activities as lectures, clinics, short courses, conferences, forums, concerts, fine art festivals, workshops, institutes, community utilization of college facilities, self-development functions and community development functions. The college welcomes the opportunity to meet with representatives in our community (e.g. educational, governmental, industrial and business organizations) to plan special types of training or activities that might be beneficial to their organization or to our community.

All inquiries in the area of community service non-credit courses should be directed to:

Director of Community Services
Roane State Community College
Harriman, Tennessee 37748

Inquiries concerning credit courses should be directed to:

Director of Admissions and Records
Roane State Community College
Harriman, Tennessee 37748

CAREER EDUCATION

The expanding economy and the increased emphasis upon scientific research and development have brought about an ever increasing demand for the well educated person to work with and under the supervision of the scientist, the engineer, the doctor, and the management of the business world. The responsibilities of this person, educated in the broad spectrum of the technologies, will continually be confronted with the acquisition of new competencies as this nation becomes more industrialized and new job classifications emerge. These new jobs are requiring education at the college level.

The gap between the skilled craftsperson and the professionally trained person has become more pronounced. Communication between these two areas is becoming more and more difficult. The semi-professional person, educated in the technologies, will bridge the existing gap. He may work with the scientist or engineer as a laboratory assistant or on some special assignment involving the skills of the skilled craftsperson. He may work with the medical profession as a technically trained person in the many areas that now exist in medical science. He may work as a specialist in the complex business areas.

The career education programs at Roane State Community College are in the areas of accounting technology, computer science technology, dietetic technology, electronics technology, fire science technology, general business administration, general clerical, hotel-motel-restaurant management, medical record technology, secretarial science, recreation management, administrative technology, management and supervision technology, and police science. The programs are constructed so that the student may seek employment at the completion of his program or transfer to a four year institution for upper level training.

TRANSFER PROGRAMS

College transfer curriculums are designed for students who intend to transfer to senior institutions. A student who is planning to transfer from Roane State Community College to a four-year institution should secure a copy of the catalog of the four-year institution selected and have it available during the registration period for use in planning his transfer program.

SUMMARY OF PROGRAM OFFERINGS

DIVISION	MAJOR	OPTION WITHIN MAJOR	DEGREE
Humanities	General	Art	AA
Humanities		General	AA
Social Science		Music	AA
Humanities	General	Social Science	AA
Education		Art	AS
Math/Science		Art Education	AS
Career Education		Biology	AS
Education		Business Administration	AS
Math/Science		Business Education	AS
Education		Chemistry	AS
Education		Early Childhood Education	AS
Education		Elementary Education	AS
		General	AS
Education		Health, Physical Education and Recreation	AS
Math/Science		Mathematics or Physical Science	AS
Education		Music Education	AS
Math/Science		Pre-Engineering	AS
Math/Science		Pre-Med, Pre-Dentistry, Pre-Pharmacy	AS
Math/Science		Pre-Nursing	AS
Education		Secondary Education	AS
Social Science		Social Science	AS
Education		Special Education	AS
Career Education		Technology	AS
Career Education	Computer Technology		AS
Career Education	Dietetic Technology		AS
Career Education	Electrical and Electronics Technology		AS
Career Education	Engineering Technology	Chemical Engineering	AS
Career Education		Civil Engineering	AS
Career Education		Electrical Engineering	AS
Career Education		Mechanical Engineering	AS
Career Education		Nuclear Engineering	AS
Career Education	General Business Administration		AS
Career Education	General Clerical		AS
Career Education	Secretarial Science		AS
Career Education	Accounting Technology		AS
Career Education	Fire Science Technology		AS
Career Education	Hotel-Motel-Restaurant Management		AS
Career Education	Management and Supervision Technology		AS
Career Education	Medical Records Technology		AS
Career Education	Operating Engineering Technology		AS
Career Education	Police Science		AS
Career Education	Recreation Management Technology		AS
Career Education	Civil Engineering	Drafting and Design	Certificate
Career Education		Surveying	Certificate
Career Education	Electronics		Certificate
Career Education	General Clerical		Certificate

COOPERATIVE EDUCATION PROGRAM

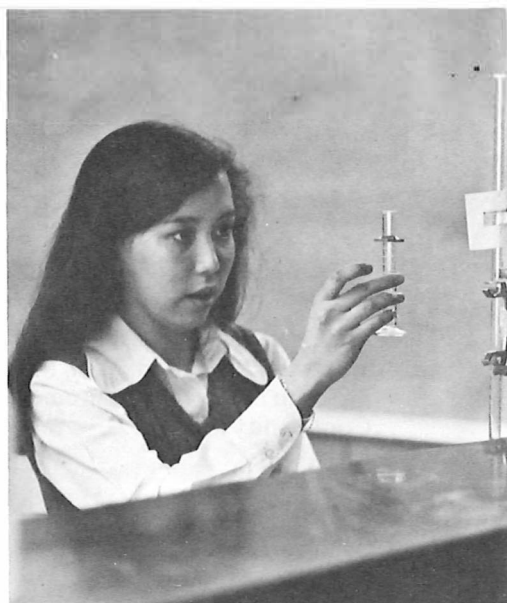
Cooperative education assumes the concept that work experience should be an integral part of the student's total education. The opportunity to engage in productive employment under the competitive conditions of life in a realistic adult environment can provide the students with insights that enrich the educational experiences. Practical experience offered at a time when the individual is at the peak of learning capacity adds relevance to education. Cooperative education integrates classroom learning and work experiences into a total learning program.

Cooperative education applies to both the transfer curricula and the Career Education curricula. The only difference is the time phasing of the work experiences into the learning program and some administrative details. In both cases the student must complete the same course work as the non-cooperative learning student and the work experiences are related as closely as possible to the student's curriculum.

DEGREE AND CERTIFICATION PROGRAMS

The following pages contain, in outline form, the degree and certificate programs of study and the summaries of required hours for all of the programs mentioned above.





**Degree Programs
and
Courses of Study**



TRANSFER PROGRAMS

ASSOCIATE OF ARTS/SCIENCE

This program is designed for students who desire to transfer to a four-year institution. With the addition of one of the options listed, this program meets the requirements for the associate degree at Roane State Community College.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
CORE REQUIREMENTS		
ENG 1010, 20, 30	Composition I, II, III	9
	Humanities ¹	6
	Sophomore English	6
	Mathematics ²	3
	Physical/Natural Science ³	12
HIS 2110, 20, 30	Survey of American History I, II, III ...	9
	Physical Education Activity	3
<hr/>		TOTAL 48

¹If not specified in option selected, student may choose from any courses offered in Humanities Division.

²If not specified in option selected, student may choose any mathematics course offered.

³If not specified in option selected, student may choose any science sequence. Requirement must be met from the same sequence.

ART OPTION

The art curriculum is designed primarily for the general enrichment of the student as well as providing professional art and liberal arts course work for transfer to a four-year institution. This program is designed to develop fundamental skills in technique and creative expression. An art major planning to transfer to a senior institution should plan a program to meet specific requirements of the lower division at the chosen institution. The art department reserves the right to retain student work for exhibition.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
ART 1110, 20, 30	Basic Studio I, II, III	9
ART 2010, 20, 30	Art History Survey I, II, III	9
	Art Electives	12
SPE 2410	Basic Speech Communication	3
	Social Science	6
	Electives ¹	12
	Option Sub-total	51
	Core Requirements	48
	TOTAL	99

¹To include nine hours of foreign language for an Associate of Arts Degree.

ART EDUCATION OPTION

The art education curriculum is designed for a student who plans to complete a baccalaureate degree in art and who desires to receive a certificate to teach art in elementary or secondary school.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
ART 1110	Basic Studio I	3
ART 1810	School Art	3
ART 2010, 20, 30	Art History Survey I, II, III	9
EDU 2010	Introduction to Education	3
HEA 2210	Personal Health	3
MAT 2310, 20	Concepts of Mathematics I, II	6
PSY 1010, 20	General Psychology I, II	6
PSY 2210	Educational Psychology	3
SPE 2410	Basic Speech Communication	3
	Art Electives	6
	Social Science Electives	6
	Sophomore English (In addition to core requirements)	3
	Electives	6
	Option Sub-total	60
	Less the courses which are in the core requirements	-9
	Core Requirements	48
	TOTAL	99

BIOLOGY OPTION

The biology curriculum is designed for the student planning to complete the baccalaureate degree at a four-year institution. This program generally meets the transfer requirements for students entering any one of the state's major universities. Before entering this plan of study, each student should become acquainted with any pre-transfer requirements the receiving institution may stipulate. The current job market gives highest priority to the graduate degree in biology.

SUMMARY OF REQUIRED COURSES

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BIO 1110, 20, 30	General Biology I, II, III ¹	0-12
BIO 2610	Genetics	4
BIO 2620	Cell Biology	4
BIO 2630	Ecology	4
CHE 1110, 20, 30	General Chemistry I, II, III	12
MAT 1110, 20, 30	Introduction to Analysis I, II, III	9
	Social Science Electives	9
	Speech	3
	Electives ²	24-12
	Option Sub-total	69
	Less the courses which are in the core requirements	-18
	Core Requirements	48
	TOTAL	99

¹Students with at least two years of high school biology or satisfactory ACT scores may, with permission from the Math-Science Division, omit Biology 1110, 20, 30 and enter BIO 2610, 20, 30 directly (see course listings under Biology). If BIO 2610, 20, 30 are elected, CHE 2310, 20, 30 are recommended as electives.

²Recommended electives might include additional biology or math, geography, physics, organic chemistry, economics, or psychology.

BUSINESS ADMINISTRATION OPTION

The business administration program includes professional studies and courses in the liberal arts. Upon completion of this two-year program, the student may then transfer to a senior institution to complete the requirements for the baccalaureate in accounting, business management, or related fields.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 1010	Introduction to Business	3
BUS 2210, 20, 30	Principles of Accounting I, II, III ¹	9
ECO 2010, 20, 30	Principles of Economics I, II, III	9
MAT 1110, 20, 30	Introduction to Analysis I, II, III ²	9-10
PSY 1010, 20	General Psychology I, II	6
SOC 2010	Introduction to Sociology	3
	Electives	15-14
	Option Sub-total	54
	Less the courses which are in the core requirements	-3
	Core Requirements	48
	TOTAL	99

¹BUS 2250 may be substituted for BUS 2230.

²Or MAT 2610, 20.

BUSINESS EDUCATION OPTION

The business education program includes professional studies and courses in liberal arts. Upon completion of this two-year program, the student may then transfer to a senior institution to complete the requirements for the baccalaureate in secretarial science or to teach business education.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BIO 1110, 20, 30	General Biology I, II, III	12
BUS 1010	Introduction to Business	3
BUS 2210, 20, 30	Principles of Accounting I, II, III ¹	9
ECO 2010, 20, 30	Principles of Economics I, II, III	9
EDU 2010	Introduction to Education	3
MAT 1110, 20, 30	Introduction to Analysis I, II, III	9
PSY 1010, 20	General Psychology I, II	6
PSY 2210	Educational Psychology	3
SSC 1010, 20, 30	Typing I, II, III	9
SSC 2010	Typing IV	3
SPE 2410	Basic Speech Communication	3

Sophomore English (In addition to core requirement)	3
Shorthand I, II, III ²	0-15
Shorthand IV ²	0-5
	<hr/>
Option Sub-total	72-92
Less the courses which are in the core requirements	-21
Core Requirements	48
	<hr/>
TOTAL	99-119

¹BUS 2250 may be substituted for BUS 2230.

²Taken only if student wishes to be certified in shorthand.

CHEMISTRY OPTION

The chemistry curriculum will allow a student to transfer to a four-year institution and work toward a Bachelor of Science Degree in chemistry, or any area which has similar requirements for the first two years.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
CHE 1110, 20, 30	General Chemistry I, II, III	12
CHE 2310, 20, 30	Organic Chemistry I, II, III	12
CHE 2210	Quantitative Analysis	4
PHY 2110, 20, 30	Physics I, II, III	12
MAT 2610, 20, 30	Calculus and Analytic Geometry I ¹ , II, III ²	15
	Social Science Electives	6
	Electives	6
		<hr/>
	Option Sub-total	67
	Less the courses which are in the core requirements	-15
	Core Requirements	48
		<hr/>
	TOTAL	100

¹Certain students may need MAT 1210 or MAT 1500 before MAT 2610.

²MAT 2710 may be substituted for MAT 2630.

EARLY CHILDHOOD EDUCATION OPTION

The early childhood education curriculum is designed for a student who wishes to take the first two years of a program toward certification. This curriculum will meet the lower division requirements for transfer to a four-year institution granting the baccalaureate degree in early childhood education. A student may transfer to a senior college and complete requirements for state certification.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
ART 1810	School Art	3
BIO 1110, 20, 30	General Biology I, II, III	12
EDU 1110	Introduction to Early Childhood Education	3
EDU 2410	Human Growth and Development	3
EDU 2810	Child Development From Infancy Through Age Eight	3
EDU 2820	Creative Activities and Experiences for Young Children	3
EDU 2910, 20	Prospective Teacher Cooperative Practicum I, II	6
EDU 2930	Field Experiences in Early Childhood Education	3
HEA 2310	Safety and First Aid	3
HEA 2410	Community Health	3
MAT 2310, 20, 30	Concepts of Mathematics I, II, III	9
MUS 1010	Music Appreciation	3
PED 2810	Teaching Physical Education in the Elementary Schools	3
PSY 1010	General Psychology I	3
PSY 2210	Educational Psychology	3
SPE 2410	Basic Speech Communication	3
	Sophomore English (In addition to core requirement)	3
	Electives	3
	Option Sub-total	72
	Less the courses which are in the core requirements	-21
	Core Requirements	48
	TOTAL	99

ELEMENTARY EDUCATION OPTION

The elementary education curriculum is designed for a student who wishes to take the first two years of a program toward certification. This curriculum will meet the lower division requirements for transfer to a four-year institution granting the baccalaureate degree in elementary education. A student may transfer to a senior college and complete requirements for state certification.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
ART 1010	Art Appreciation ¹	3
EDU 2010	Introduction to Education	3
EDU 2710	Reading in the Elementary Schools	3
GGY 1010	Physical Geography I	3
HEA 2210	Personal Health	3
HEA 2410	Community Health	3
MAT 2310, 20, 30	Concepts of Mathematics I, II, III	9
PED 2810	Teaching Physical Education in the Elementary Schools	3
PSY 1010, 20	General Psychology I, II	6
PSY 2210	Educational Psychology	3
PSY 2410	Child Psychology	3
SPE 2410	Basic Speech Communication	3
	Sophomore English (In addition to core requirement)	3
	Electives ²	12
	Option Sub-total	60
	Less the courses which are in the core requirements	-9
	Core Requirements	48
	TOTAL	99

¹Art 1810 may be substituted for Art 1010.

²The following courses are suggested as elective hours for students planning to be teacher aides or to meet specific requirements of their choice of a four-year institution.

EDU 2910, 20	Prospective Teacher Cooperative Practicum I, II	6
GGY 1020	Physical Geography II	3
GGY 2110	World Regional Geography I	3
PED 2850	Playground Leadership	3

This curriculum is designed to provide an alternative in required course work for elementary education and provide a student with a terminal degree. This program will, in part, meet the lower division requirements for transfer to a four-year institution granting the baccalaureate degree in elementary education. All of the courses should benefit the student who desires employment as an elementary teacher aide.

NOTE: Each student in this program will be required to select one physical education activity course from each of the following areas: team activity, individual activity, and dance activity.

GENERAL OPTION

With an appropriate choice of electives, a student can, by following this general program, earn an associate degree from RSCC and also complete the lower division requirements for the baccalaureate at a four-year institution. Students who are interested in a profession such as law, agriculture, architecture, etc. should select this option.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
	Electives ¹	51
	Option Sub-total	51
	Core Requirements	48
	TOTAL	99

¹To include 9 hours of foreign language for an Associate of Arts Degree.

HEALTH, PHYSICAL EDUCATION AND RECREATION OPTION

The health, physical education, and recreation curriculum is designed to meet the needs of a student who desires to transfer to a senior institution and complete a baccalaureate degree with a major or minor in this area. This program is also designed to help a student maintain the best possible physical, mental, and social well-being. The degree program will be planned by subject area adviser in line with the state certification and the catalog requirements of the senior institution.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BIO 1110, 20, 30	General Biology I, II, III	12
EDU 2010	Introduction to Education	3
HEA 2210	Personal Health	3
HEA 2310	Safety and First Aid	3
HEA 2410	Community Health	3
MAT 2310, 20	Concepts of Mathematics I, II	6
PED 2710	Introduction to Physical Education	3
PED 2720	Teaching Individual and Dual Sports	3
PED 2810	Teaching Physical Education in Elementary Schools	3
PSY 1010, 20	General Psychology I, II	6
PSY 2210	Educational Psychology	3
PSY 2410	Child Psychology	3
SPE 2410	Basic Speech Communication	3
	Recreation Electives	6
	Social Science Electives	6
	Sophomore English (In addition to core requirement)	3
	Electives	3
	Option Sub-total	72
	Less the courses which are in the core requirements	-21
	Core Requirements	48
	TOTAL	99

MATHEMATICS OR PHYSICAL SCIENCE OPTION

The mathematics or physical science curriculum will allow a student to transfer to a four-year college or university and work toward a Bachelor of Science Degree in mathematics, physics, or any area which has similar requirements for the first two years.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
CHE 1110, 20, 30	General Chemistry I, II, III ¹	12
MATHEMATICS: 28 credits to be taken from the following: ..		28
MAT 1210	Trigonometry	3
MAT 1310	Symbolic Logic	3
MAT 1500	Pre-Calculus	5

MAT 2510	Elementary Statistics	.....3
MAT 2610, 20, 30, 40	Calculus and Analytic Geometry I, II, III, IV	.....20
MAT 2650	Linear Algebra	.....3
MAT 2710	Differential Equations	.....5
PHY 2110, 20, 30	Physics I, II, III	.....12
	Social Science Electives	.....9
	Electives	.....5
	Option Sub-total	.....66
	Less the courses which are in the core requirements	.....-15
	Core Requirements	.....48
	TOTAL	99

¹A student choosing an emphasis in mathematics may substitute a three quarter (12 quarter hour) sequence in biology.

MUSIC OPTION

A music major planning to transfer to a senior institution should become familiar with the specific lower division requirements at that individual senior institution. The curriculum in this degree is designed to give the performing music major a sound basis for continuing music study at a senior institution.

NOTE: All music majors must have a major applied area at the college level; all music majors must pass a piano proficiency examination equivalent to two years of college piano; all music majors must attend all solo classes and other selected performances.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
MUS 1110, 20, 30	Beginning Theory I, II, III	.....12
MUS 2010, 20, 30	Introduction to Music Literature I, II, III	.....6
MUS 2110, 20, 30	Advanced Theory I, II, III	.....12
	Applied Instruction in Music	.....12

Ensemble	6
Electives ¹	12
	<hr/>
Option Sub-total	57
Less the courses which are in the core requirements	-6
Core Requirements	48
	<hr/>
TOTAL	99

¹Must be a foreign language for the Associate of Arts Degree.

MUSIC EDUCATION OPTION

The music education curriculum is designed for a student who plans to complete a baccalaureate degree in music and who desires to receive a certificate to teach music in elementary or secondary school.

NOTE: All music majors must have a major applied area at the college level; all music majors must pass a piano proficiency examination equivalent to two years of college piano; all music majors must attend all solo classes and other selected performances.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
EDU 2010	Introduction to Education	3
HEA 2210	Personal Health	3
MUS 1110, 20, 30	Beginning Theory I, II, III	12
MUS 2010, 20, 30	Introduction to Music Literature I, II, III	6
MUS 2110, 20, 30	Advanced Theory I, II, III	12
PSY 1010	General Psychology I	3
PSY 2210	Educational Psychology	3
PSY 2410	Child Psychology	3
SPE 2410	Basic Speech Communication	3
	Applied Instruction to Major Areas	9
	Ensemble	6
		<hr/>
	Option Sub-total	63
	Less the courses which are in the core requirements	-6
	Core Requirements	48
		<hr/>
	TOTAL	105

PRE-ENGINEERING OPTION

The basic pre-engineering curriculum is designed for a student desiring to earn a baccalaureate degree in any engineering field at a four-year institution. Upon the successful completion of the basic program, the student can transfer to an engineering college and major in any of these engineering fields: aerospace, chemical, civil, electrical, engineering mechanics, engineering physics, engineering science, industrial, mechanical, metallurgical, nuclear, etc.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
CHE 1110, 20, 30	General Chemistry I, II, III	12
ERG 1010, 20	Engineering Graphics I, II	6
ERG 1100	Introduction to Engineering	3
ERG 2010, 20	Engineering Mechanics I, II	6
ERG 2110	Thermodynamics	3
MAT 1500	Pre-Calculus ¹	0-5
MAT 2610, 20, 30, 40	Calculus and Analytic Geometry I, II, III, IV	20
MAT 2710	Differential Equations	5
PHY 2110, 20, 30	Physics I, II, III	12
	Electives	5-0
		<hr/>
	Option Sub-total	72
	Less the courses which are in the core requirements	-15
	Core Requirements	48
		<hr/>
	TOTAL	105

¹Exceptional students may start in MAT 2610.

PRE-MEDICINE, PRE-DENTISTRY, PRE-PHARMACY OPTION

This unified basic curriculum in pre-medicine, pre-dentistry, and pre-pharmacy is designed to prepare a student for entrance into a professional school, such as The University of Tennessee or a similar institution, where admission requirements are two years of college experience. Medical college usually requires three or four years of college experience. A student at Roane State Community College should consult the catalog of the university of his choice to determine specific requirements for admission.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BIO 1110, 20, 30	General Biology I, II, III ¹	12
CHE 1110, 20, 30	General Chemistry I, II, III	12
CHE 2310, 20, 30	Organic Chemistry I, II, III	12
MAT 1110, 20, 30	Introduction to Analysis I, II, III	9
PHY 2010, 20, 30	General Physics I, II, III	12
	Social Science Electives	6
	Electives	3
	Option Sub-total	66
	Less the courses which are in the core requirements	-15
	Core Requirements	48
	TOTAL	99

¹Students with at least two years of high school biology or satisfactory ACT scores may, with permission from the Math-Science Division, omit Biology 1110, 20, 30 and enter Biology 2610, 20, 30 directly (see course listings under Biology). If Biology 1110, 20, 30 are elected, Biology 2610, 20 are recommended as electives. If BIO 2610, 20, 30 are elected, one year of foreign language is also recommended.

PRE-NURSING OPTION

The pre-nursing curriculum is designed for the student planning to complete the baccalaureate degree at a four-year institution. This program meets the transfer requirements of students entering the junior year of study at The University of Tennessee at Knoxville. Before entering this plan of study, the student should become knowledgeable of specific pre-transfer requirements of other transfer institutions. Since many programs accept a limited number of applicants early in the school year for the next year's class, application should be made at the conclusion of the freshman year at Roane State.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BIO 2310, 20, 30	Anatomy and Physiology I, II, III	12
BIO 2510	Microbiology	4
BIO 2610	Genetics	4
CHE 1010, 20, 30	Basic Chemistry I, II, III	12

MAT 1110	Introduction to Analysis I	.....3
PSY 1010, 20, 30	General Psychology I, II, III	.....9
PSY 2410	Child Psychology	.....3
SOC 2010	Introduction to Sociology	.....3
SOC 2020	Social Institutions	.....3
SOC 2030	Social Problems	.....3
SOC 2110	Introduction to Cultural Anthropology	..3
SOC 2120	Introduction to Prehistory and Archeology	.....3
	Electives	.....6
		<hr/>
	Option Sub-total	.....68
	Less the courses which are in the core requirements	.....-15
	Core Requirements	.....48
		<hr/>
	TOTAL	101

SECONDARY EDUCATION OPTION

The secondary education curriculum is designed for the student who wishes to take the first two years of a program toward certification. This option will meet the lower division requirements for transfer to a four-year institution granting the baccalaureate degree in secondary education. A student may transfer to a senior college and complete requirements for state certification.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
ART 1010	Art Appreciation ¹	.....3
EDU 2010	Introduction to Education	.....3
HEA 2210	Personal Health	.....3
HEA 2410	Community Health	.....3
MAT 2310, 20	Concepts of Mathematics I, II ²	.....6
PSY 1010, 20	General Psychology I, II	.....6
PSY 2210	Educational Psychology	.....3
PSY 2410	Child Psychology	.....3
SPE 2410	Basic Speech Communication	.....3
	Social Science Electives	.....6

Sophomore English (In addition to core requirements)	3
Electives ³	18
	<hr/>
Option Sub-total	60
Less the courses which are in the core requirements	-9
Core Requirements	48
	<hr/>
	TOTAL 99

¹MUS 1010 may be substituted for ART 1010.

²Students planning to teach mathematics should take a higher mathematics sequence.

³Electives should be concentrated in the area of certification.

SOCIAL SCIENCE OPTION

The social science curriculum is designed to assist students planning to complete the baccalaureate degree at a four year institution in any one of the following areas: geography, history, political science, psychology, and sociology. In order to meet lower division requirements for transfer to any one of the state's major universities, students should select social science courses from their choice of emphasis and related social science disciplines. Students should also follow the advice of their social science faculty advisor and become acquainted with any pre-transfer requirements the receiving institution may stipulate.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
SPE 2410	Basic Speech Communication	3
	Sophomore English (In addition to core requirement) ¹	3
	Mathematics (In addition to core requirement)	3
	Humanities Electives ¹	3
	Social Science Electives	42
	Electives ¹	3
		<hr/>
	Option Sub-total	57
	Less the courses which are in the core requirements	-6
	Core Requirements	48
		<hr/>
		TOTAL 99

¹Students planning to pursue a Bachelor of Arts Degree should take one year of foreign language instead of 3 hours in sophomore literature, 3 hours in humanities electives, and 3 hours general electives.

SPECIAL EDUCATION OPTION

The special education curriculum is designed for a student who wishes to take the first two years of a program toward certification. This curriculum will meet the lower division requirements for transfer to a four-year institution granting the baccalaureate degree in special education. A student may transfer to a senior college and complete requirements for state certification.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BIO 1110, 20, 30	General Biology I, II, III	12
EDU 1010	Orientation to the Education of the Exceptional Child	3
EDU 2410	Human Growth and Development	3
EDU 2810	Child Development From Infancy Through Age Eight	3
EDU 2910, 20	Prospective Teacher Cooperative Practicum I, II	6
MAT 2310, 20, 30	Concepts of Mathematics I, II, III	9
MUS 1010	Music Appreciation	3
PED 2810	Teaching Physical Education in the Elementary Schools	3
PSY 1010, 20	General Psychology I, II	6
PSY 2210	Educational Psychology	3
PSY 2510	Social Psychology	3
SOC 2010	Introduction to Sociology	3
SOC 2020	Social Institutions	3
SOC 2110	Introduction to Cultural Anthropology ..	3
SPE 2410	Basic Speech Communication	3
	Sophomore English (In addition to core requirement)	3
	Electives	3
	Option Sub-total	72
	Less the courses which are in the core requirements	-21
	Core Requirements	48
	TOTAL	99

TECHNOLOGY OPTION

This program is designed for the student who plans to obtain a Bachelor of Science Degree in technology or industrial education.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
CST 1010	Introduction to Data Processing	3
CHE 1110, 20	General Chemistry I, II	8
EET 1010, 1020	Electric Circuits I, II	6
EET 1015, 1025	Electric Circuits I, II Lab	2
ERG 1010, 20	Engineering Graphics I, II	6
MAT 1050	Algebra and Trigonometry I	5
MAT 1500	Pre-Calculus	5
MAT 2610	Calculus and Analytic Geometry I	5
PHY 2010, 20, 30	General Physics I, II, III	12
	Technology Electives	15
	Option Sub-total	67
	Less the courses which are in the core requirements	-14
	Core Requirements	48
	TOTAL	101



CAREER EDUCATION PROGRAMS

COMPUTER SCIENCE TECHNOLOGY

Associate of Science

The technical society of today is in a state of constant change brought about by automation and technological innovations. The computer is one of the greatest contributors to automation of this decade and also one of the decade's most significant technological achievements. The growth and development of the electronic computer in this decade has created many new jobs in the scientific, engineering, and business fields. The Computer Science Technology curriculum is designed to prepare students to enter into any of these computer related fields.

Two options are offered in Computer Science Technology at Roane State Community College: (1) a scientific computer option, and (2) a business computer option. The scientific option is designed for students interested in scientific and engineering applications of the computer, while the business option is designed for students interested in business data processing.

The Computer Science Technology curriculum has as its primary objectives:

(1)The task of qualifying the student for a successful career as a programmer, systems analyst, or assistant computer center manager if his respective option is business, through the orderly presentation of programming languages, business, and managerial courses.

(2)The task of qualifying a student for transferring to a four-year school which has a major in computer science, if he chooses the scientific option.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Basic Core		
CST 1010	Introduction to Data Processing	3
CST 1020	Introduction to Programming	3
CST 2310	Introduction to Systems Analysis	3
ENG 1010, 20, 30	Composition I, II, III	9
MAT 2510	Elementary Statistics	3
	Physical Education Activities	3
	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/>	
	TOTAL	24

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Business Emphasis		
BUS 1010	Introduction to Business	3
BUS 1810	Business Mathematics	3
BUS 1820	Finance Mathematics	3
BUS 2210, 20, 30	Principles of Accounting I, II, III	9
BUS 2910	Management and Supervision I	3
CST 2220, 30	COBOL Programming I, II	6
CST 2410, 20	Systems Analysis I, II	6
CST 2510	Advanced Computing and Programming Systems	3
CST 2610	Management Information Systems	3
CST 2700	Management of EDP Function	3
ECO 2010, 20, 30	Principles of Economics I, II, III	9
HIS 2110, 20, 30	Survey of American History I, II, III ..	9
MAT 1050	Algebra and Trigonometry I	5
PHL 1310	Symbolic Logic	3
PSY 2610	Psychological Aspects of Management ..	3
SPE 2440	Business and Professional Speaking	3
	Social Science Electives	3
	Sub-total	77
	TOTAL	101

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Scientific Emphasis		
CHE 1010, 20, 30	Basic Chemistry I, II, III	12
CST 1210	Assembler Language Programming	3
CST 2210	FORTRAN Programming	3
	Sophomore English	9
HIS 2110, 20, 30	Survey of American History I, II, III ..	9
MAT 1500	Pre-Calculus	5
MAT 2610, 20	Calculus and Analytic Geometry I, II ..	10
MAT 2650	Linear Algebra	3
PHY 2110, 20, 30	Physics I, II, III	12
	Social Science Electives	3
	Electives	6
	Sub-total	75
	TOTAL	99

DIETETIC TECHNOLOGY**Associate of Science**

The Associate of Science Degree program in Dietetic Technology and Food Service Management provides students with an opportunity to study dietetics at the college level. The curriculum combines general education and technical courses with supervised field work. This program is seven quarters in length and is designed to train dietetic technicians who can promote or improve quality food service and nutritional care for individuals in hospitals, nursing homes, rehabilitation centers, and other medical care facilities and agencies thus helping others while enjoying a satisfying rewarding career. The concept of a two-year training program for dietetic technicians is fully endorsed by The American Dietetic Association.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BIO 2310, 20	Anatomy and Physiology I, II	8
BIO 2510	Microbiology	4
BUS 1810	Business Mathematics	3
BUS 2910	Management and Supervision I	3
CHE 1010, 20, 30	Basic Chemistry I, II, III	12
CST 1010	Introduction to Data Processing	3
DFT 1010	Fundamentals of Food Service	3
DFT 1020	Food Principles	3
DFT 1030	Advanced Menu Planning and Quality Food	3
DFT 1810, 20	Field Experience I, II	5
DFT 2110	Food Purchasing and Cost Control	3
DFT 2210	Principles of Nutrition	3
DFT 2220	Therapeutic Nutrition	3
DFT 2310	Food Systems Administration	3
DFT 2410	Sanitation and Safety	3
DFT 2810, 20, 30	Field Experience III, IV, V	12
ENG 1010, 20, 30	Composition I, II, III	9
HIS 2110, 20, 30	Survey of American History I, II, III	9
HMT 2110	Food Distribution	3
HMT 2120	Quality Food Preparation	3
PSY 1010	General Psychology I	3
	Physical Education Activities	3
TOTAL HOURS		104

ELECTRICAL AND ELECTRONICS TECHNOLOGY**Associate of Science**

The Electrical and Electronics Technology program is intended to meet the need in industry for personnel capable of entry and advancement in the highly diversified electronics field involving research development, manufacturing, quality control, installation, and the service of electronic systems.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 1850	Personal Finance	3
EET 1010, 20	Electric Circuits I, II	6
EET 1015, 25	Electric Circuits I, II Lab	2
EET 1210	Materials and Construction Practices ...	2
EET 1310, 20	Electronics I, II	6
EET 1315, 25	Electronics I, II Lab	2
EET 1410, 20	Electronics Drafting I, II	4
EET 1640	Electrical Wiring	4
EET 2310	Digital Electronics I	3
EET 2315	Digital Electronics I Lab	1
ENG 1010, 20	Composition I, II	6
ENG 2820	Technical Writing	3
ERG 1010	Engineering Graphics I	3
HIS 2110, 20, 30	Survey of American History I, II, III ...	9
MAT 1010, 20	Technical Math I, II ¹	6
SOC 2010	Introduction to Sociology	3
	Technical Electives ²	21
	Natural or Physical Science Electives ...	6
	Physical Education Activities	3
	Social Science or Humanities Electives ..	6
	Electives	3
TOTAL HOURS		101-102

¹MAT 1050 may be substituted for MAT 1010, 20.

²To be selected from electrical and electronics courses with Division Chairperson approval.

ENGINEERING TECHNOLOGY**Associate of Science**

The primary objectives of the Engineering Technology program are to provide students with: (1) the basic background information to understand the environment in which he will work, (2) the technical training

and experience needed to be productive at job entry level, and (3) the educational foundation necessary to undertake further study. Other objectives include the re-training and upgrading of people already employed.

Engineering Technology degree options are available in Civil, Electrical, Chemical, Mechanical, and Nuclear fields. Two certificate programs related to Civil Engineering are available which are (1) Drafting and Design, and (2) Surveying.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Core Requirements		
CHE 1110	General Chemistry I .....	.4
CST 2210	FORTTRAN Programming .....	.3
EET 1010, 20	Electric Circuits I, II .....	.6
ENG 1010, 20	Composition I, II .....	.6
ENG 2820	Technical Writing .....	.3
ERG 1010, 20	Engineering Graphics I, II .....	.6
ERG 1100	Introduction to Engineering .....	.3
ERG 1110	Applied Mechanics I .....	.3
EET 1010, 20	Electric Circuits I, II .....	.6
HIS 2110, 20, 30	Survey of American History I, II, III ..	.9
MAT 1050	Algebra and Trigonometry I ¹ .....	.5
MAT 1500	Pre-Calculus .....	.5
MAT 2610	Calculus and Analytic Geometry I .....	.5
PHY 2010	General Physics I .....	.4
PHY 2020 or	General Physics II or	
CHE 1120	General Chemistry II .....	.4
	Physical Education Activities .....	.3
	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/> Sub-total	69

¹Student may substitute MAT 1010 and MAT 1020 for MAT 1050.

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Chemical Engineering Technology Option		
CHE 1120	General Chemistry II (satisfies core requirements)	
CHE 1130	General Chemistry III .....	.4
CHE 2310, 20	Organic Chemistry I, II .....	.8
CHT 2010, 20, 30	Unit Operations I, II, III .....	.9

CHT 2110	Matter and Energy Balances	2
CHT 2210, 20	Quantitative Analysis I, II	6
CHT 2410	Heat, Mass, and Momentum Transfer ...	2
ERG 1120	Applied Mechanics II	3
ERG 2110	Thermodynamics	3
	Sub-total	37
	TOTAL HOURS	106

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Civil Engineering Technology Option		
CET 2010	Construction Planning	3
CET 2110, 20	Surveying I, II	8
CET 2210	Soil Mechanics	3
CET 2220	Hydraulics	3
CET 2250	Structural Analysis	3
ERG 2210	Strength of Materials	3
	Sub-total	23

Plus *either* of the following technical elective sequences:

Technology Sequence		
CET 2310	Concrete Technology	3
CET 2410	Traffic and Transportation Technology ..	3
CET 2510	Bituminous Technology	3
CET 2810	Route Surveying and Highway Design ..	3
	Sub-total	12
	TOTAL HOURS	104

OR

Design Sequence		
CET 2610	Reinforced Concrete Design	3
CET 2620	Advanced Reinforced Concrete Design ..	3
CET 2710	Structural Steel Design	3
CET 2720	Advanced Structural Steel Design	3
	Sub-total	12
	TOTAL HOURS	104

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Electrical Engineering Technology Option		
EET 1015	Electric Circuits I Lab	1
EET 1025	Electric Circuits II Lab	1
EET 1310, 20	Electronics I, II	6
EET 1315	Electronics I Lab	1
EET 1325	Electronics II Lab	1
EET 2310	Digital Electronics I	3
EET 2315	Digital Electronics I Lab	1
EET 2510	Industrial Electronics and Control I	3
EET 2515	Industrial Electronics and Control I Lab	1
ERG 2110	Thermodynamics	3
PHY 2020	General Physics II (satisfies core requirement)	
Sub-total		21

Plus *either* of the following technical elective sequences:

Electronics Sequence

EET 1210	Materials and Construction Practices ...	2
EET 1330	Electronics III	3
EET 1335	Electronics III Lab	1
EET 2210	Electronics Project	1
EET 2250	Special Topics in Electronics	3
EET 2320	Digital Electronics II	3
EET 2325	Digital Electronics II Lab	1
Sub-total		14

TOTAL HOURS 104

OR

Power and Industrial Sequence

EET 1610, 20	Electrical Systems Design I, II	6
EET 1630	Elements of Electrical Generation, Transmission and Distribution	3
EET 1635	Elements of Electrical Generation, Transmission and Distribution Lab ...	1

EET 2520	Industrial Electronics and Control II	3
EET 2525	Industrial Electronics and Control II Lab	1
		14
	Sub-total	14
	TOTAL HOURS	104

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
	Mechanical Engineering Technology Option	
CST 1010	Introduction to Data Processing	3
ERG 1120	Applied Mechanics II	3
MET 1010, 20	Manufacturing Processes I, II	6
MET 1110	Materials of Industry	3
MET 1210	Industrial Organizations and Institutions	3
MET 1310	Hydraulics and Pneumatics	3
PHY 2020	General Physics II (satisfies core requirement)	
		21
	Sub-total	21

Plus *either* of the following technical elective sequences:

	Design Sequence	
ERG 2210	Strength of Materials	3
MET 2010	Piping Drafting	3
MET 2110	Machine Design	3
MET 2210	Basic Tool Design	4
MET 2310	Design Problems	4
		17
	Sub-total	17
	TOTAL HOURS	107

	Production Sequence	
MET 2410	Methods and Operations Analysis	4
MET 2510	Statistics and Quality Control	3
MET 2610	Plant Layout and Materials Handling . . .	4
MET 2710	Process Planning	4
MET 2810	Production Problems	4
		19
	Sub-total	19
	TOTAL HOURS	109

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Nuclear Engineering Technology Option		
ERG 1120	Applied Mechanics II	3
ERG 2110	Thermodynamics	3
MAT 2620	Calculus and Analytic Geometry II	5
NUC 1010	Introduction to Nuclear Technology	3
NUC 2010	Nuclear Physics	3
NUC 2110	Radiation Biology	3
NUC 2120	Radiation Protection	3
NUC 2310	Reactor Analysis and Design	3
NUC 2510	Nuclear Laboratory	3
NUC 2710	Radioisotopes	3
PHY 2020	General Physics II (satisfies core requirement)	
PHY 2030	General Physics III	4
	Sub-total	36
	TOTAL HOURS	105

GENERAL BUSINESS ADMINISTRATION

(Two-Year)

Associate of Science

The two-year program in General Business Administration is designed to prepare the interested student in many phases of the business field. Upon graduation, the student may enter a variety of career positions in business. This curriculum provides training in a number of areas, such as advertising, banking, credit finance, retailing, insurance, and accounting. This program is for a student planning to seek employment at the end of two years.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 1010	Introduction to Business	3
BUS 1810	Business Mathematics	3
BUS 1820	Finance Mathematics	3
BUS 1850	Personal Finance	3
BUS 2310	Income Tax Accounting—Personal	3
BUS 2320	Income Tax Accounting—Business	3
BUS 2410	Business Machines—Computational	3
BUS 2510	Legal Environment for Business	3
BUS 2520	Business Law	3
CST 1010	Introduction to Data Processing	3

ECO 2010, 20, 30	Principles of Economics I, II, III	9
ENG 1010, 20	Composition I, II	6
ENG 2820	Technical Writing	3
HIS 2110, 20, 30	Survey of American History I, II, III	9
PSY 1010, 20	General Psychology I, II	6
PSY 2610	Psychological Aspects of Management	3
SOC 2010	Introduction to Sociology	3
SPE 2410	Basic Speech Communication	3
	Physical Education Activities	3
	Business Electives	6
	Electives	3

Sub-total 84

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Small Business Emphasis		
BUS 2270, 80	Managerial Accounting I, II	6
BUS 2810	Salesmanship	3
BUS 2830	Marketing	3
BUS 2900	Small Business Management	3
		<hr/> Sub-total 15
TOTAL HOURS		99

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
General Business Emphasis		
BUS 2210, 20, 30	Principles of Accounting I, II, III	9
BUS 2250	Cost Accounting	3
CST 1020	Introduction to Programming	3
		<hr/> Sub-total 15
TOTAL HOURS		99

GENERAL CLERICAL

(Two-Year)

Associate of Science

This two-year General Clerical program is designed for a student interested in an office occupation emphasizing clerical duties rather than shorthand proficiency. The wide range of courses included in this curriculum provide training for office work in a number of areas; for example—filing clerk, receptionist, typist, and numerous other general

clerical job opportunities. In addition to the skills gained in typewriting and office machines, the student acquires a broad background of knowledge that will enable him/her to function more effectively in the business world.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 1010	Introduction to Business	3
BUS 1110	Business Communications	3
BUS 1810	Business Mathematics	3
BUS 1850	Personal Finance	3
BUS 2210, 20, 30	Principles of Accounting I, II, III ¹	9
BUS 2410	Business Machines-Computational	3
BUS 2420	Business Machines-Duplication	3
BUS 2510	Legal Environment for Business	3
COE 1010	Cooperative Education I ²	3
CST 1010	Introduction to Data Processing	3
ECO 2010, 20	Principles of Economics I, II	6
ENG 1010, 20, 30	Composition I, II, III	9
HIS 2110, 20, 30	Survey of American History I, II, III ..	9
PSY 1010, 20	General Psychology I, II	6
PSY 2610	Psychological Aspects of Management ..	3
SPE 2410	Basic Speech Communication	3
SSC 1010, 20, 30	Typing I, II, III	9
SSC 1210	Machine Transcription	3
SSC 2010	Typing IV	3
SSC 2210	Office Practice	3
SSC 2810	Report Writing/Records Management ...	3
	Physical Education Activities	3
	Electives	6
TOTAL HOURS		102

¹BUS 2250 Cost Accounting may be substituted for BUS 2230.

²Or a course approved by the Division Chairman.

SECRETARIAL SCIENCE

(Two-Year)

Associate of Science

The two-year program in Secretarial Science is designed to prepare a professional secretary in the many aspects of secretarial work in the modern business, medical, or legal office. Proficiency is developed in the skills of typewriting, shorthand dictation, transcription, office machines, and office management. The wide scope of courses offered in

this program will provide opportunities for increased understanding of the many facets involved in the operation of business today. This curriculum is for a student planning to seek employment at the end of two years. Secretarial Science degree options are available in Executive, Medical, and Legal Secretarial fields.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Basic Core		
BUS 1010	Introduction to Business	3
BUS 1110	Business Communications	3
BUS 1810	Business Mathematics	3
BUS 2210	Principles of Accounting I	3
BUS 2410	Business Machines-Computational	3
BUS 2420	Business Machines-Duplication	3
BUS 2510	Legal Environment for Business	3
COE 1010	Cooperative Education I ¹	3
CST 1010	Introduction to Data Processing	3
ECO 2010	Principles of Economics I	3
ENG 1010, 20	Composition I, II	6
HIS 2110, 20, 30	Survey of American History I, II, III	9
PSY 1010	General Psychology I	3
SPE 2410	Basic Speech Communication	3
SSC 1010, 20, 30	Typing I, II, III	9
SSC 1110, 20, 30	Shorthand I, II, II	15
SSC 1210	Machine Transcription	3
SSC 2010	Typing IV	3
SSC 2210	Office Practice	3
SSC 2810	Report Writing/Records Management ...	3
	Physical Education Activities	3
	SUB-TOTAL	90

¹Or a course approved by the Division Chairman.

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Executive Secretary Emphasis		
BUS 2220	Principles of Accounting II	3
ECO 2020	Principles of Economics II	3
SSC 2110	Shorthand IV	5
	Sub-total	11
	TOTAL HOURS	101

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Legal Secretary Emphasis		
SSC 2310	Legal Secretary I	3
SSC 2320	Legal Secretary II	3
SSC 2330	Legal Transcription	3
	Sub-total	9
TOTAL HOURS		99

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
Medical Secretary Emphasis		
MRT 1210	Medical Terminology I	3
MRT 1220	Medical Terminology II	3
MRT 1230	Medical Transcription	3
	Sub-total	9
TOTAL HOURS		99

ACCOUNTING TECHNOLOGY
Associate of Science

The primary objective of the two-year Accounting Technology curriculum is to train students for employment as technicians in the field of accounting. Other objectives involve the re-training and upgrading of people already employed.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 1010	Introduction to Business	3
BUS 1810	Business Mathematics	3
BUS 1820	Finance Mathematics	3
BUS 2210, 20, 30	Principles of Accounting I, II, III	9
BUS 2250	Cost Accounting	3
BUS 2310, 20	Income Tax Accounting I, II	6
BUS 2410	Business Machines-Computational	3
BUS 2510	Legal Environment for Business	3
BUS 2520	Business Law	3
BUS 2710, 20, 30	Intermediate Accounting I, II, III	9
CST 1010	Introduction to Data Processing	3
CST 1020	Introduction to Programming	3
CST 2100	Computer Applications in Accounting	3

ECO 2010, 20, 30	Principles of Economics I, II, III	9
ENG 1010, 20, 30	Composition I, II, III	9
ENG 2820	Technical Writing	3
HIS 2110, 20, 30	Survey of American History I, II, III	9
MAT 1110	Introduction to Analysis I	3
MAT 2510	Elementary Statistics	3
PSY 2610	Psychological Aspects of Management	3
	Physical Education Activities	3
	Electives	3
	TOTAL HOURS	99

FIRE SCIENCE TECHNOLOGY
Associate of Science

The Fire Science Technology program is designed to prepare students for initial entrance into employment or advancement with municipalities, industrial firms, or other employers requiring fire protection personnel. Graduates may also be employed by insurance companies as salesmen, fire insurance adjusters, or bureau raters.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 2910	Management and Supervision I	3
CST 1010	Introduction to Data Processing	3
EET 1010, 20	Electric Circuits I, II	6
ENG 1010, 20	Composition I, II	6
ENG 2820	Technical Writing	3
ERG 1010, 20	Engineering Graphics I, II	6
ERG 1100	Introduction to Engineering	3
FST 1010	Introduction to Fire Science	3
FST 1020	Municipal Fire Protection	3
FST 1030	Industrial Hazards	3
FST 1110	Construction Codes and Fire Protection Standards	3
FST 2010	Fire Fighting Strategy	3
FST 2110	Inspection Principles and Practices	4
FST 2120	Principles of Hydraulics	3
FST 2210	Flammable Materials	3
FST 2230	Water Suppression Systems	3
FST 2510	Fire Protection Equipment and Systems	3
FST 2610	Fire Department Administration	3
FST 2620	Seminar	3
HEA 2310	Safety and First Aid	3

HIS 2110, 20, 30	Survey of American History I, II, III	9
MAT 1010, 20	Technical Math I, II	6
POL 1030	State and Local Government in the U.S.	3
	Natural Science	12
	Physical Education Activities	3

TOTAL HOURS 103

HOTEL-MOTEL-RESTAURANT MANAGEMENT

Associate of Science

The Hotel-Motel-Restaurant Management curriculum prepares the student for mid-management employment in the hospitality industry. The team teaching concept is utilized in the program. On-the-job training through cooperative agreements with industry is a unique feature of the course of study.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 1010	Introduction to Business	3
BUS 1810	Business Mathematics	3
BUS 1820	Finance Mathematics	3
BUS 2210, 20, 30	Principles of Accounting I, II, III	9
BUS 2410	Business Machines-Computational	3
BUS 2510	Legal Environment for Business	3
BUS 2520	Business Law	3
BUS 2810	Salesmanship	3
BUS 2820	Retailing	3
BUS 2910, 20, 30	Management and Supervision I, II, III	9
ENG 1010, 20	Composition I, II	6
ENG 2820	Technical Writing	3
HEA 2310	Safety and First Aid	3
HIS 2110, 20, 30	Survey of American History I, II, III	9
HMT 1000	Introduction to Hotel-Motel-Restaurant Management	3
HMT 1010	Hotel-Motel Front Office Procedure	3
HMT 1110, 20, 30	Hotel-Motel-Restaurant Seminar I, II, III	9
HMT 2010	Hotel-Motel-Restaurant Practicum	3
HMT 2110	Food Distribution	3
HMT 2120	Quality Food Preparation	3
PSY 2610	Psychological Aspects of Management	3
SPE 2440	Business and Professional Speaking	3
	Physical Education Activities	3

TOTAL HOURS 99

MANAGEMENT AND SUPERVISION TECHNOLOGY
Associate of Science

The Management and Supervision Technology program is designed for individuals who desire to be managers or supervisors in business and industry. It is a program which offers training in the basic principles of supervision such as planning, organizing, directing, controlling, and coordinating business and industrial endeavors.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 1010	Introduction to Business	3
BUS 1810	Business Mathematics	3
BUS 1820	Finance Mathematics	3
BUS 1850	Personal Finance	3
BUS 2270, 80	Managerial Accounting I, II	6
BUS 2410	Business Machines-Computational	3
BUS 2510	Legal Environment for Business	3
BUS 2520	Business Law	3
BUS 2810	Salesmanship	3
BUS 2820	Retailing	3
BUS 2830	Marketing	3
BUS 2910, 20, 30	Management and Supervision I, II, III ..	9
BUS 2940	Management Seminar	3
CST 1010	Introduction to Data Processing	3
ECO 2010, 20	Principles of Economics I, II	6
ENG 1010, 20	Composition I, II	6
ENG 2820	Technical Writing	3
FST 1030	Industrial Hazards	3
HIS 2110, 20, 30	Survey of American History I, II, III ..	9
PSY 1010, 20	General Psychology I, II	6
PSY 2610	Psychological Aspects of Management ..	3
SPE 2440	Business and Professional Speaking	3
	Physical Education Activities	3
	Electives	6
TOTAL HOURS		99

MEDICAL RECORDS TECHNOLOGY
Associate of Science

The Medical Records Technology program emphasizes specialized skills in the management of medical records. The medical records technician helps to provide accuracy and efficiency in the management of the patient's records. In smaller health facilities, the medical records

technician is in charge of the medical records room. Application of the didactic instruction is provided through clinical experience in local health facilities. The program is jointly accredited by the American Medical Record Association and the American Medical Association.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BIO 2310, 20, 30	Anatomy and Physiology I, II, III	12
BUS 1810	Business Mathematics	3
CST 1010	Introduction to Data Processing	3
ENG 1010, 20, 30	Composition I, II, III	9
HIS 2110, 20, 30	Survey of American History I, II, III	9
MRT 1010, 20, 30	Medical Records I, II, III	9
MRT 1210, 20	Medical Terminology I, II	6
MRT 1230	Medical Transcription	3
MRT 2310, 20, 30	Directed Practice I, II, III	9
MRT 2410	Advanced Medical Records	3
MRT 2420	Office Supervision for the Medical Record Supervisor	3
MRT 2430	Medical Records Seminar	3
PSY 1010, 20	General Psychology I, II	6
PSY 2610	Psychological Aspects of Management . . .	3
SOC 2010	Introduction to Sociology	3
SOC 2020	Social Institutions	3
SPE 2440	Business and Professional Speaking	3
SSC 1010	Typing I (or equivalent)	3
	Physical Education Activities	3
	Electives	3

TOTAL HOURS 99

OPERATING ENGINEERING TECHNOLOGY
Associate of Science

The primary objective of the Operating Engineering Technology Program is to train two-year technicians for employment in one of the four options offered: Grading and Paving Equipment Operator, Plant Equipment Operator, Heavy Duty Repairman, or Universal Equipment Operator.

Other program objectives include re-training and upgrading of employees working in one of these fields of operating engineering.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 1850	Personal Finance	3
EET 1110, 20	Electric Fundamentals I, II	6
ENG 1010	Composition I	6
ENG 2820	Technical Writing	3
HEA 2310	Safety and First Aid	3
HIS 2110, 20, 30	Survey of American History I, II, III ...	9
MAT 1010, 20	Technical Math I, II	6
OET 1010	General Introduction to Operating Engineering and History of the Labor Movement	2
OET 1020	Introduction to General Construction Power Sources	2
OET 1030	Introduction to Basic Power Trains and Undercarriages	2
OET 1040	Introduction to Basic Electricity, Hydraulics, and Pneumatics	3
OET 1110, 20, 30	Apprenticeship Field Experiences I, II, III	16
OET 1210	Introduction to Fuels, Oils, and Lubricants	2
OET 1220	General Introduction to Welding, Rigging, Soils, and Compaction	2
OET 1230	Function of Grades and Grade Stakes ..	2
OET 1240	Introduction to Construction Equipment ..	2
OET 2540, 50	Apprenticeship Field Experiences IV, V	18
	Physical Education Activities	3
	Program Electives	18
	TOTAL HOURS	108

POLICE SCIENCE AND CRIMINOLOGY EDUCATION

Associate of Science

The Police Science and Criminology Education program is designed to meet the need in society for personnel capable of entry and advancement in the law enforcement field. The two year curriculum emphasizes an academic approach to law enforcement rather than a training approach.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 2510	Legal Environment for Business	3
BUS 2910	Management and Supervision I	3
CST 1010	Introduction to Data Processing	3
ENG 1010, 20	Composition I, II	6
ENG 2820	Technical Writing	3
FST 1020	Municipal Fire Protection	3
HEA 2310	Safety and First Aid	3
HIS 2110, 20, 30	Survey of American History I, II, III ..	9
MAT 1010	Technical Math I	3
PST 1010	Introduction to Law Enforcement	3
PST 1110, 20	Police Science I, II	6
PST 2010	Police Administration and Organization	3
PST 2130, 40	Police Science III, IV	6
PST 2200	Seminar in Police Problems	6
POL 1010	Fundamentals of American Government	3
POL 1020	United States National Government ...	3
POL 1030	State and Local Government in the United States	3
PSY 1010, 20	General Psychology I, II	6
PSY 2310	Abnormal Psychology	3
PSY 2420	Adolescent Psychology	3
SOC 2010	Introduction to Sociology	3
SOC 2020	Social Institutions	3
SOC 2030	Social Problems	3
SOC 2130	Introduction to Criminology	3
	Physical Education Activities	3
	Electives	3
	TOTAL HOURS	99

**RECREATION MANAGEMENT AND ADMINISTRATION
TECHNOLOGY**

Associate of Science

The Recreation Management and Administration Technology program leadership curriculum has been designed to provide the postsecondary student with: (1) the basic background information required to understand the environment within which he will work, (2) the broad technical training and minimum experience necessary to be a productive employee in an entry-level job, and (3) the educational foundation needed to undertake further study within the field through in-service training, professional short courses, or—to a limited extent—enrollment in a four-year program.

The Recreation Management and Administration program employs a basic core of recreation courses. After taking the basic core courses, students are allowed to select an emphasis in one or more of the following career fields: Camp Administration, Park Administration, Marine Management, and Recreation Leadership.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
ART 1810	School Art	3
BUS 1810	Business Mathematics	3
ENG 1010, 20, 30	Composition I, II, III	9
	Biological Science ¹	12
HEA 2210	Personal Health	3
HEA 2310	Safety and First Aid	3
HIS 2110, 20, 30	Survey of American History I, II, III ..	9
PED 2720	Teaching Individual and Dual Sports ...	3
PSY 1010, 20	General Psychology I, II	6
PSY 2610	Psychological Aspects of Management ..	3
REC 1010	Introduction to Recreation	3
REC 1020	Social Recreation	3
REC 1030	Outdoor Education	3
REC 1110	Team Sports	3
REC 1310	Arts and Crafts	3
REC 2010	Organization and Administration in Recreation	3
REC 2310	Water Sports	3
REC 2410	Field Work	3
SOC 2010	Introduction to Sociology	3
SOC 2030	Social Problems	3
SPE 2410	Basic Speech Communication	3
SPE 2730	Introduction to Theatre	3
	Program Electives	12
	Physical Education Activities	3
	TOTAL HOURS	105

¹Students desiring an emphasis in Park Administration should take BIO 2210, 20.

CERTIFICATE OF PROFICIENCY PROGRAMS

CIVIL ENGINEERING—DRAFTING AND DESIGN (CERTIFICATE)

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
CET 2010	Construction Planning	3
CET 2050, 60	Civil Drafting I, II	6
CET 2250	Structural Analysis	3
CET 2610	Reinforced Concrete Design	3
CET 2620	Advanced Reinforced Concrete Design ..	3
CET 2710	Structural Steel Design	3
CET 2720	Advanced Structural Steel Design	3
CST 2210	FORTRAN Programming	3
ENG 2820	Technical Writing	3
ERG 1010, 20	Engineering Graphics I, II	6
ERG 1050	Elementary Mechanics	3
ERG 2210	Strength of Materials	3
EET 1410	Electronics Drafting I	2
MAT 1050	Algebra and Trigonometry ¹	5
MAT 1500	Pre-Calculus	5
MET 2010	Piping Drafting	3
TOTAL HOURS		57

¹Student may substitute MAT 1010 and MAT 1020 for MAT 1050.

CIVIL ENGINEERING—SURVEYING (CERTIFICATE)

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
CET 2010	Construction Planning	3
CET 2110, 20	Surveying I, II	8
CET 2210	Soil Mechanics	3
CET 2410	Traffic and Transportation Technology ..	3
CET 2810	Route Surveying and Highway Design ..	3
ERG 1010, 20	Engineering Graphics I, II	6
ERG 1050	Elementary Mechanics	3

ERG 2210	Strength of Materials	3
ENG 2820	Technical Writing	3
MAT 1050	Algebra and Trigonometry I ¹	5
MAT 1500	Pre-Calculus	5
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	TOTAL HOURS	45

¹Student may substitute MAT 1010 and MAT 1020 for MAT 1050.

ELECTRONICS TECHNOLOGY (CERTIFICATE)

This Electronics Technology program is intended to meet the need in industry for personnel capable of entry and advancement in the highly diversified electronics field. The one-year curriculum emphasizes the practical aspects of electronic application.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
ENG 1010	Composition I	3
EET 1010	Electric Circuits I	3
EET 1110, 20	Electric Fundamentals I, II	6
EET 1140, 50	Electronic Communications I, II	10
EET 1160	Industrial Electronics Measurement and Control	5
MAT 1050	Algebra and Trigonometry I	5
	Natural Science	12
	Social Science	3
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	TOTAL HOURS	47

GENERAL CLERICAL (CERTIFICATE)

This one-year General Clerical program is designed for a student interested in an office occupation emphasizing clerical duties. The wide range of courses included in this curriculum provide training for office work in a number of areas; for example—filing clerk, receptionist, typist, and numerous other general clerical job opportunities.

SUMMARY OF REQUIRED HOURS

<i>Catalog Number</i>	<i>Course Title</i>	<i>Quarter Hours</i>
BUS 1010	Introduction to Business	3
BUS 1110	Business Communications	3
BUS 1810	Business Mathematics	3
BUS 2210, 20	Principles of Accounting I, II	6
BUS 2410	Business Machines-Computational	3
BUS 2420	Business Machines-Duplication	3
BUS 2510	Legal Environment for Business	3
CST 1010	Introduction to Data Processing	3
ECO 2010	Principles of Economics I	3
ENG 1010	Composition I	3
SSC 1010, 20, 30	Typing I, II, III	9
SSC 1210	Machine Transcription	3
SSC 2010	Typing IV	3
SSC 2210	Office Practice	3
SSC 2810	Report Writing/Records Management ...	3

TOTAL HOURS 54



COURSES OF STUDY

In addition to the credit courses of study in each of the following disciplines, the College also offers from quarter to quarter various special courses of study not listed. These courses are offered through the Community Services Program, and all inquiries should be addressed to the Director of Community Services.

Certain courses have prerequisites. However, in limited instances, prerequisites may be waived by the instructor and the Dean of Instruction.

In general, a course in a given discipline may be replaced by a course in the same discipline having a higher catalog number.

ART

ART 1010—Art Appreciation3 Credits

Analysis of expressive form, stylistic distinction. Traditional and Modern techniques of painting, sculpture, architecture, and printmaking. A lecture course, illustrated with slides.

ART 1110—Basic Studio I3 Credits

A structured studio course for beginning art majors consists of fundamentals emphasizing basic and related problems in two dimensional design and composition as a foundation for advanced work. May be taken in any sequence with Basic Studio II and III.

2 hours lecture—4 hours studio

ART 1120—Basic Studio II3 Credits

A continuation of Basic Studio I and the study of two dimensional design with emphasis on the theory of color and its application. (Required of all art majors. May be taken in any sequence with Basic Studio I and III.)

2 hours lecture—4 hours studio

ART 1130—Basic Studio III3 Credits

An extension of the study of fundamentals of design with basic and related problems in three dimensional structure. (Required of all art majors. May be taken in any sequence with Basic Studio I and II.)

2 hours lecture—4 hours studio

ART 1810—School Art3 Credits

The child, his development, and needs in creative art experiences. Two and three dimensional lab experiences appropriate for later use with children. Designed for elementary education majors.

ART 2010—Art History Survey I3 Credits

A survey of architecture, painting, and sculpture from prehistoric times to the Renaissance.

ART 2020—Art History Survey II3 Credits

A survey of architecture, painting, and sculpture from the Renaissance to nineteenth century Impressionism.

ART 2030—Art History Survey III—Modern Art3 Credits

A detailed survey of architecture, painting, and sculpture from the late nineteenth century to the present.

- ART 2410—Ceramics I**3 Credits
 Lecture and studio experience in ceramic techniques; clay mixing, hand building, wheel throwing, glazing, firing. May be started any quarter.
 2 hours lecture—4 hours studio
- ART 2420—Ceramics II**3 Credits
 Refinement of fundamental skills and techniques. Individualized consultation with instructor.
 2 hours lecture—4 hours studio
- ART 2430—Ceramics III**3 Credits
 Creative experimentation with contemporary sculptural form, clays, and glazes.
 2 hours lecture—4 hours studio
- ART 2510—Painting I**3 Credits
 An introduction to the techniques, materials, and tools used in oil painting. Still life, figure and landscape.
 2 hours lecture—4 hours studio
- ART 2520—Painting II**3 Credits
 A continuation of ART 2510 with an emphasis on individual experimentation.
 2 hours lecture—4 hours studio
- ART 2530—Painting III**3 Credits
 An introduction to the technique, materials, and tools used in acrylic and polymer painting.
 2 hours lecture—4 hours studio
- ART 2610—Weaving I**3 Credits
 Exploration of techniques in loom and non-loom experiences. Plain weave, tapestry, warping (dressing) of frame looms, four harness looms and the drafting of weaves will be given in conjunction with a history of textiles and the art of weaving.
- ART 2620—Weaving II**3 Credits
 Art from fibers and fabrics. An extension of skills in Weaving I to include macramé, wrapping, rugmaking, collage, quilting and mixed media.
- ART 2710—Introduction to Printmaking**3 Credits
 Technical instruction in printmaking processes; intaglio, relief, and planographic processes.
 2 hours lecture—4 hours studio
- ART 2720—Advanced Printmaking**3 Credits
 Continuation of Introduction to Printmaking with emphasis on individual experimentation.
 2 hours lecture—4 hours studio

BIOLOGY

To receive credit for a Biology course, the lecture section must be accompanied by a laboratory session during the same quarter.

- BIO 1110—General Biology I**4 Credits
 An introduction to biology at the cellular and subcellular levels.
 3 hours lecture—2 hours laboratory

NOTE: Students with the equivalent of at least 2 years of high school biology or satisfactory ACT scores may elect BIO 2610, 20, 30 (see course descriptions) instead of BIO 1110, 20, 30.

- BIO 1120—General Biology II**4 Credits
 An introduction to the structure and function of multicellular organisms.
 3 hours lecture—2 hours laboratory
- BIO 1130—General Biology III**4 Credits
 An introduction to the principles of heredity and to environmental biology.
 3 hours lecture—2 hours laboratory
- BIO 2210—Plant Kingdom I**4 Credits
 Lower plants; emphasis on evolutionary relationships, morphology and development. (Prerequisite: BIO 1130 or consent of instructor.)
 3 hours lecture—3 hours laboratory
- BIO 2220—Plant Kingdom II**4 Credits
 Higher plants; emphasis on evolutionary relationship, morphology and physiology. (Prerequisite: BIO 1110-1120-1130 or consent of instructor.)
 3 hours lecture—3 hours laboratory
- BIO 2310—Anatomy and Physiology I**4 Credits
 A study of basic biological chemistry, cellular structure and function (including cellular respiration, protein synthesis, and cell division), and control systems of the body. The laboratory will provide experiments to illustrate principles covered in lecture as well as detailed anatomy and physiology of the integumentary and skeletal system.
 3 hours lecture—3 hours laboratory
- BIO 2320—Anatomy and Physiology II**4 Credits
 A study of the anatomy and physiology of the nervous system, muscular system, circulatory and immune systems, and the respiratory system. The laboratory will provide anatomical investigation of and physiological experimentation with these systems.
 3 hours lecture—3 hours laboratory
- BIO 2330—Anatomy and Physiology III**4 Credits
 A study of the anatomy and physiology of the excretory, digestive, endocrine, reproductive and special sense systems. The laboratory will provide anatomical investigation of and physiological experimentation with these systems.
 3 hours lecture—3 hours laboratory
- BIO 2410—Invertebrate Zoology**4 Credits
 A survey of the invertebrate animals, their biological structure, and comparison among members of the groups. (Prerequisite: BIO 1130 or consent of instructor.)
 3 hours lecture—3 hours laboratory
- BIO 2420—Comparative Vertebrate Anatomy**4 Credits
 A survey of the vertebrate animals emphasizing their development and the comparative anatomy of organ systems. (Prerequisite: BIO 1130 or consent of instructor.)
 3 hours lecture—3 hours laboratory

- BIO 2510—Microbiology4 Credits**
 An introductory course in microbiology dealing with bacteria, fungi, yeast, and viruses to include discussions of cell structure, identification, taxonomy, metabolism, genetics, resistance, infection, disease, immunity, microbiology of food products and industrial microbiology. (Prerequisite: BIO 1130 or 2330 or consent of instructor.)
 3 hours lecture—3 hours laboratory
- BIO 2610—Genetics4 Credits**
 A study of heredity including classical and modern principles and laboratory experiments involving several experimental organisms. (Prerequisite: BIO 1110, 20, 30, or consent of instructor, CHE 1030 or CHE 1130, and MAT 1130 are recommended.)
 3 hours lecture—3 hours laboratory
- BIO 2620—Cell Biology4 Credits**
 A study of cellular structure and function. (Prerequisite: BIO 1110, 1120, 1130, CHE 1010, 20, 30)
 3 hours lecture—3 hours laboratory
- BIO 2630—Ecology4 Credits**
 Relations between organisms and their environment. Includes human environmental problems. Laboratories consist of sampling techniques and field trips. (Prerequisite: BIO 1130)
 3 hours lecture—3 hours laboratory
- BIO 2700—2750—Independent Scientific Investigation3 Credits**
 Independent laboratory/library research in biology by qualified students under the supervision of a faculty member. Especially designed to develop interest in and to apply techniques of scientific research. Up to nine credit hours may be earned. (Prerequisite: BIO 1130 and consent of the faculty members.)

BUSINESS AND COMMERCE

- BUS 1010—Introduction to Business3 Credits**
 Orientation course designed to give an overall view of business as a framework for further detailed study into accounting, data processing, finance, real estate, management, retailing, and marketing. Included are vocational/career opportunities, business terminology, and an appreciation of the methods and procedures used by businessmen to arrive at decisions.
- BUS 1110—Business Communications3 Credits**
 A study of the essentials of English in business communication. The basic fundamentals in grammar and punctuation are applied to business letter writing. Emphasis is given on composing and dictating business letters into dictation/transcription equipment. Job application and interviewing techniques are covered along with techniques for more effective listening.
- BUS 1810—Business Mathematics3 Credits**
 The fundamentals of mathematics as applied to business. Emphasis on problems involving discounts, simple and compound interest, insurance and payroll.

- BUS 1820—Finance Mathematics**3 Credits
 Math applied to business operations such as preparing payroll, discounting notes and drafts, distributing profits and dividends, trading on the stock and bond markets, figuring consumer credit, and computing federal income taxes and social security benefits.
- BUS 1850—Personal Finance**3 Credits
 A course designed to aid the student in practical money management. Topics included are charting financial objectives; budgeting; consumer borrowing, renting, and buying; investing; employee benefits and taxation. Designed for special career education curricula.
- BUS 2010—Real Estate I**3 Credits
 A fundamental real estate course covering the basic laws and principles of Tennessee Real Estate, giving understanding, background, and terminology necessary for advanced study in specialized courses. Will be of assistance to those preparing for the real estate affiliate broker's and broker's license examinations.
- BUS 2020—Real Estate II**3 Credits
 A study of Tennessee Real Estate Law, including rights incident to property ownerships and management, agency, contracts, and applications to real estate transfer, conveyances, probate proceedings, trust deeds, and foreclosure, as well as recent legislation governing real estate transactions. Applies toward educational requirement of a broker's examination.(Prerequisite: BUS 2010)
- BUS 2030—Real Estate III**.....3 Credits
 Institutional and governmental funds for financing real estate transactions. (Prerequisite: BUS 2010)
- BUS 2050—Money and Banking**3 Credits
 A study of the basic principles and concepts of money and credit and their importance in the economy. It includes a study of monetary theory, the Federal Reserve System, monetary and fiscal policies, money and credit flows, and the impact of these on business decisions and economic activity.
- BUS 2210—Principles of Accounting I**3 Credits
 Covers the basic principles and procedures from the management viewpoint. Determination of net income and valuation of assets and the basic problems connected therewith are given careful attention.
- BUS 2220—Principles of Accounting II**3 Credits
 Continues with notes and interest determination; plant depreciation; voucher systems; taxes on payroll, property and income; and the theory of internal control. (Prerequisite: BUS 2210)
- BUS 2230—Principles of Accounting III**3 Credits
 Covers partnership organizations and operation, cost accounting, corporation capital accounts, earnings and dividends, bonds, funds statement and statement analysis. (Prerequisite: BUS 2220)
- BUS 2250—Cost Accounting**3 Credits
 Principles of manufacturing and distribution cost accounting. Material, labor, and overhead costs in job order and process cost accounting; analysis of cost distribution and related problems. Business procedures and their relation to business situations and needs of management. (Prerequisite: BUS 2220)

- BUS 2270—Managerial Accounting I3 Credits**
 An introductory course in accounting which covers the basic principles and procedures of accounting with an emphasis on the managerial viewpoint. This course includes a review of the basic accounting cycle and financial statements, emphasizing use rather than preparation. Students must secure departmental approval to take this course.
- BUS 2280—Managerial Accounting II3 Credits**
 A continuation of Managerial Accounting I with an emphasis on control and accounting for decision making. (Prerequisite: BUS 2270 and departmental approval)
- BUS 2310—Income Tax Accounting—Personal3 Credits**
 Federal income tax laws with emphasis on the preparation of returns for individuals. (Prerequisite: BUS 2210 or permission of instructor)
- BUS 2320—Income Tax Accounting—Business3 Credits**
 Federal income tax laws with emphasis on the preparation of returns for partnerships and corporations. (Prerequisite: BUS 2310)
- BUS 2410—Business Machines—Computational3 Credits**
 Operation of the printing and electronic calculators and the ten-key adding machine.
- BUS 2420—Business Machines—Duplication3 Credits**
 Operation of the spirit, stencil, and offset duplicating machines. A study of other methods of duplication and business machines. (Prerequisite: SSC 1010 or equivalent)
- BUS 2510—Legal Environment for Business3 Credits**
 Emphasis is placed on classification of laws, historical background of our systems of laws, duties, buying services, insurance, consumer protection, negotiable instruments, and business organization. The student will gain experience in recognizing and isolating issues of legal importance of precise language in business and legal transactions.
- BUS 2520—Business Law3 Credits**
 Designed to acquaint the student with the privileges and responsibilities of the individual under business law. Topics studied will include the uniform commercial code, contracts, sales, agency, partnerships, corporations, and negotiable instruments.
- BUS 2710—Intermediate Accounting I3 Credits**
 Extensive analysis of the principal elements of accounting systems and statements. (Prerequisite: BUS 2210, 20, 30)
- BUS 2720—Intermediate Accounting II3 Credits**
 An intensive study of the balance sheet including valuation of assets, disclosure of liabilities, proper account classification, balance sheet and related income and expense items; and preparation of financial statements including tax regulations, management needs, and credit purposes. (Prerequisite: BUS 2710)
- BUS 2730—Intermediate Accounting III3 Credits**
 Continuation of BUS 2720. (Prerequisite: BUS 2720)

- BUS 2810—Salesmanship****3 Credits**
 A specific course emphasizing the relationship of product and market, industrial and consumer retailing, methods of market analysis, salesmanship and sales methods.
- BUS 2820—Retailing****3 Credits**
 A study of the principles and practices of retailing including planning, policies, and procedures of distribution.
- BUS 2830—Marketing****3 Credits**
 A general but critical survey of the field of marketing, covering international industries and commerce, distribution of resources, factors of distribution and transportation.
- BUS 2900—Small Business Management****3 Credits**
 An introductory course designed to provide an overview of the business environment and requirements for successfully operating a small business. Topics covered will include forms of business, credit management, utilizing professionals, information management, etc. Students must secure departmental approval to take this course.
- BUS 2910—Management and Supervision I****3 Credits**
- BUS 2920—Management and Supervision II****3 Credits**
- BUS 2930—Management and Supervision III**.....**3 Credits**
 A three course sequence designed to introduce the basic aspects of supervisory development, to include the functions of management, communication skills, interpersonal relations, motivation, morale, discipline, leadership training and evaluation, decision making and self-development.
- BUS 2940—Management Seminar****3 Credits**
 Consideration of current problems, issues, and developments in the area of management. Students are guided through individual projects and outside research related to their area of concentration and employment training.
- BUS 2950—Labor Relations****3 Credits**
 A broad overview of the general nature of the labor-management relationship as it exists. Specific areas studied include: historical, legal and structural environments which influence contractual content and labor relations; and the examination of the negotiation, administration, and content of the labor contract. Students must secure departmental approval to take this course.

CHEMISTRY

To receive credit for a Chemistry course, the lecture section must be accompanied by a laboratory session during the same quarter.

- CHE 1010—Basic Chemistry I****4 Credits**
 Introductory course in chemistry dealing with the basic principles such as atomic structure, periodic law, physical states of matter, chemical bonding, types of compounds, gas laws. (Prerequisite: MAT 1110 or high school algebra.)

CHE 1020—Basic Chemistry II4 Credits
Acids and bases, solutions, equilibria, and introductory topics in aliphatic and aromatic organic chemistry.

CHE 1030—Basic Chemistry III4 Credits
A continuation with emphasis on functional groups, biochemistry, drugs, and biologically active compounds.
3 hours lecture—3 hours laboratory

NOTE: CHE 1010, 20, and 30 are intended for students in the humanities, the social sciences, home economics, nursing, and many programs in the agricultural sciences. These courses must be taken in sequence.

CHE 1110—General Chemistry I4 Credits
A study of fundamental principles of chemistry, such as mathematical calculations of chemical relationships, atomic structure, periodic relationships, molecular structure, bonding, and the chemistry of oxygen, hydrogen, and water. (Prerequisite: 2 years of high school algebra or one college level math course.)
3 hours lecture—3 hours laboratory

CHE 1120—General Chemistry II4 Credits
Kinetic Molecular Theory, physical states of matter, solution chemistry, and electrolytes. (Prerequisite: CHE 1110)
3 hours lecture—3 hours laboratory

CHE 1130—General Chemistry III4 Credits
Oxidation-reduction, electrochemistry, molecular and ionic equilibria, nuclear chemistry, and brief survey of organic chemistry. (Prerequisite: CHE 1120)
3 hours lecture—3 hours laboratory

CHE 2210—Quantitative Analysis4 Credits
The study of the basic theories of quantitative analysis with stress on the theories of neutralization, precipitation, volumetric, and gravimetric analysis. (Prerequisite: CHE 1130)
3 hours lecture—3 hours laboratory

CHE 2310—Organic Chemistry I4 Credits
A study of the properties, preparations, nomenclature, and reactions of the aliphatic compounds. Concepts such as mechanisms of reactions and the relationship between structure and properties are developed. (Prerequisite: CHE 1130)
3 hours lecture—3 hours laboratory

CHE 2320—Organic Chemistry II4 Credits
A study of the properties, preparations, nomenclature, reactions, and spectroscopic characteristics of some aromatic compounds and various other compounds classified according to functional group. (Prerequisite: CHE 2310)
3 hours lecture—3 hours laboratory

- CHE 2330—Organic Chemistry III**4 Credits
 A continuation of CHE 2320 and including an introduction to proteins, amino acids, carbohydrates and fats. (Prerequisite: CHE 2320)
 3 hours lecture—3 hours laboratory
- CHE 2700—2750—Independent Scientific Investigation**3 Credits
 Independent laboratory/library research in chemistry by qualified students under the supervision of a faculty member. Especially designed to develop interest in and to apply techniques of scientific research. Up to nine credit hours may be earned. (Prerequisite: CHE 1130 and consent of the faculty member.)

CHEMICAL TECHNOLOGY

- CHT 2010—Unit Operations I**3 Credits
 Presentation of and experiments in the basic ideas of Chemical Engineering. Intended to familiarize the student with chemical process equipment and its uses and applications.
 6 hours lecture—laboratory
- CHT 2020—Unit Operations II**3 Credits
 Continuation of Unit Operations I. Heat Transfer and Introduction to Mass Transfer Operations. 6 hours lecture—laboratory
- CHT 2030—Unit Operations III**3 Credits
 Continuation of Unit Operations II. Combined Heat and Mass Transfer Operations. 6 hours lecture—laboratory
- CHT 2110—Matter and Energy Balances**2 Credits
 Problem solving course in the application and utilization of the basic laws of conservation of matter and energy as they are used in chemical engineering.
 2 hours lecture—laboratory
- CHT 2210—Quantitative Analysis I**4 Credits
 The study of the basic theories of quantitative analysis with stress on the theories of neutralization, precipitation, volumetric, and gravimetric analysis. (Prerequisite: CHE 1030.)
 4 hours lecture—laboratory
- CHT 2220—Quantitative Analysis II**2 Credits
 A continuation of Quantitative Analysis I with emphasis on instrumental methods of analysis.
 2 hours lecture—laboratory
- CHT 2410—Heat, Mass, and Momentum Transfer**2 Credits
 Each student will select a problem in heat mass and/or momentum transfer, determine a solution and present a written and oral report to the instructor.

CIVIL ENGINEERING TECHNOLOGY

- CET 2010—Construction Planning**3 Credits
 Introduction to the equipment used in civil engineering construction and the principles of construction planning.

CET 2050—Civil Drafting I3 Credits

Course will introduce the student to drafting practices pertinent to the field of Civil Engineering. Work will include topographic drawings, land layout, utility plans and profiles. (Prerequisite: ERG 1020)

1 hour lecture—5 hours laboratory

CET 2060—Civil Drafting II3 Credits

Course will continue topic covered in Civil Drafting I with additional emphasis on structural design drawing in steel, wood, and concrete. Shop drawings as required in steel and reinforced concrete will be covered. (Prerequisite: CET 2050)

1 hour lecture—6 hours laboratory

CET 2110—Surveying I4 Credits

Introduction to surveying, chaining and pacing, direct and profile leveling, measurements of angles, transit-tape-traversing, traverse analysis, calculation of areas, adjustment of instruments. (Prerequisite: MAT 1050 or MAT 1010 or 1020)

3 hours lecture—3 hours laboratory

CET 2120—Surveying II4 Credits

Basic complex circular curves, stadia surveying, topographic surveying analysis and preparation of topographic maps. Field work parallels classroom instruction. (Prerequisite: CET 2110)

3 hours lecture—3 hours laboratory

CET 2210—Soil Mechanics3 Credits

Physical properties of soils as applied to civil engineering; index properties, permeability, moisture-density, consolidation and shear strength. (Prerequisite: ERG 2210)

CET 2220—Hydraulics3 Credits

Principles of fluid flow and development of practical hydraulics resulting from study of fluid statics, flow of real fluid in pipes, multiple pipe lines, liquid flow in open channels, and fluid measurement techniques. (Prerequisite: ERG 1050 or ERG 1110)

CET 2250—Structural Analysis3 Credits

Analysis of statically determinate structures; shear and moment diagrams; influence lines; introduction to matrix algebra; introduction to statically indeterminate methods of analysis. (Prerequisite: ERG 1050 or ERG 1110) (Corequisite: ERG 2210)

CET 2310—Concrete Technology3 Credits

Introduction to the properties of portland cement concrete; methods of designing concrete mixtures and the mixing, testing, and quality control during construction.

CET 2410—Traffic and Transportation Technology3 Credits

Introduction to the techniques of traffic and transportation surveys. The application of survey data to the planning, design and operation of modern transportation systems. (Prerequisite: CET 2110)

CET 2510—Bituminous Technology3 Credits

Introduction to the properties of bituminous materials, primarily asphalt cement used in highway construction; testing of asphalt materials and the quality control of asphalt concrete mixtures.

- CET 2610—Reinforced Concrete Design3 Credits**
 Design, investigation and detailing of reinforced concrete structural members.
 (Prerequisite: CET 2250)
- CET 2620—Advanced Reinforced Concrete Design3 Credits**
 Continuation of CET 2610. (Prerequisite: CET 2610)
- CET 2710—Structural Steel Design3 Credits**
 Design, investigation and detailing of basic steel members. (Prerequisite:
 CET 2250)
- CET 2720—Advanced Structural Steel Design3 Credits**
 Continuation of CET 2710. (Prerequisite: CET 2710)
- CET 2810—Route Surveying and Highway Design3 Credits**
 Principles of route surveying; simple, compound and transition curves; grades
 and vertical curves; earthwork and haul quantities. (Prerequisite: CET 2120)

COOPERATIVE EDUCATION

- COE 1010—Cooperative Education I3 Credits**
- COE 1020—Cooperative Education II3 Credits**
- COE 1030—Cooperative Education III3 Credits**
- COE 1040—Cooperative Education IV3 Credits**
 A sequence of experiential training. Student must be approved by the Co-op
 Coordinator and an employer for full-time employment in industry, business,
 education or governmental agency to give practical training in the student's
 major field of study. The student will submit to the coordinator, by the end of
 the third week of the quarter, a listing of the major training objectives. An
 end-of-quarter report will describe the degree of accomplishment of these
 objectives.

COMPUTER SCIENCE TECHNOLOGY

- CST 1010—Introduction to Data Processing3 Credits**
 An orientation to the field of electronic data processing. The history of data
 processing—familiarization with the broad concepts and applications related
 to business and industry. Unit record and digital computer concepts and
 techniques, including number systems, and data flow patterns.
- CST 1020—Introduction to Programming3 Credits**
 A basic course in programming techniques. Introducing the student to BASIC
 FORTRAN and COBOL. Utilizing lab work to gain experience in program-
 ming applications. (Corequisite: CST 1010 or consent of instructor.)
- CST 1210—Assembler Language Programming3 Credits**
 A basic course in programming techniques. Introduction to assembler
 involving lab work in the programming of business applications. (Prerequisite:
 CST 1010)

- CST 2100—Computer Applications in Accounting3 Credits**
 A course designed to acquaint the student with some of the more common computer applications in the field of accounting. Topics include payroll accounting, depreciation, cash receipts and disbursements and many others. This course should not be taken until completion of all the prerequisites listed below. (Prerequisites: BUS 2210, BUS 2220, and CST 1020)
- CST 2210—FORTRAN Programming3 Credits**
 A basic course in scientific oriented FORTRAN (formula translation) programming language. (Prerequisite: CST 1020 or consent of instructor.)
- CST 2220—COBOL Programming I3 Credits**
 A study of commercial oriented language (COBOL) to enable the student to gain programming proficiency through lectures and labs with "hands on" computer experience. (Prerequisite: CST 1020 or consent of instructor.)
- CST 2230—COBOL Programming II3 Credits**
 A course for developing programming skills. This course will include the program development, coding, and testing of sophisticated programs, macro writing, utility modification, etc. (Prerequisite: CST 2220)
- CST 2310—Introduction to Systems Analysis3 Credits**
 This course is designed to teach the basic fundamentals of systems analysis with emphasis on systems study and design, flow charting, file descriptions, procedure analysis, and documentation. (Prerequisite: CST 1020)
- CST 2410—Systems Analysis I3 Credits**
 This course is designed to teach the fundamentals of management by system. The life cycle of a management system is presented in terms of (1) study and design; (2) implementation; and (3) operation, evaluation, and modification. Major emphasis is in the area of analysis and design. (Prerequisite: CST 2310)
- CST 2420—System Analysis II3 Credits**
 This course involves the application of computer analysis and application principles. The student will design a system for an actual industry case, undergo faculty systems evaluation, and make a case study presentation. (Prerequisite: CST 2410)
- CST 2510—Advanced Computing and Programming Systems3 Credits**
 This course involves writing and testing of all programs and documentation necessary to implement the systems developed in CST 2420. (Prerequisite: CST 2420)
- CST 2610—Management Information Systems3 Credits**
 This course is designed to provide the student with the concepts, characteristics, and operation of management information systems. (Prerequisite: CST 2420)
- CST 2700—Management of EDP Function3 Credits**
 This course is designed to teach the concepts of managing the data processing function in an organization. The normal managerial functions are discussed as related to the data processing area. (Prerequisite: CST 2610 and PSY 2610)
- CST 2910—Cooperative Seminar4 Credits**
 This course offers a college programmed study, designed to give the student practical experience in the area of his major by placing him in a cooperative work study program with local organizations. The student is required to attend a one period seminar per week. (Summer Quarter only.)

DEVELOPMENTAL STUDIES

Roane State Community College offers specialized programs to students in need of intensive preparation for college level academic work. Students are directed into this individualized work on the basis of an evaluation of high school work, placement test scores, recommendation of faculty advisers or personal assessment.

The basic courses are numbered 0100 to 0990 and should not be taken for college transfer credit. Up to six hours of such credit may be used as elective credit toward the Associate Degree.

These courses are not sequential and may be repeated when necessary.

DVS 0510—Basic Communications I3 Credits

This course is selected by students who need to upgrade such basic skills as sentence writing and paragraph development or who need to upgrade mechanics of grammar and usage. A student may enroll in this course while simultaneously enrolled in Composition I.

DVS 0520—Basic Communications II3 Credits

DVS 0530—Basic Communications III1-3 Credits

These courses are a continuation of Basic Communications I. The number of hours taken is determined by the degree of mastery achieved in Basic Communications I.

DVS 0610—Basic Science I3 Credits

A course designed for the student who does not have background necessary for college level science courses.

DVS 0620—Basic Science II1-3 Credits

DVS 0630—Basic Science III1-3 Credits

These courses are a continuation of Basic Science I. The number of hours taken is determined by the degree of mastery achieved in Basic Science I.

DVS 0710—Basic Mathematics I3 Credits

A course designed to upgrade skills necessary for college level mathematics. Course work may include one or more of the following: fundamentals of basic mathematics, Algebra, Business Mathematics, and mathematical theory for teacher education.

DVS 0720—Basic Mathematics II1-3 Credits.

A continuation of Basic Mathematics I.

DVS 0730—Basic Mathematics III1-3 Credits.

A continuation of Basic Mathematics II.

DIETETIC TECHNOLOGY

DFT 1010—Fundamentals of Food Service3 Credits

Overview of the food service industry, planned to acquaint the student with the organization, operation, and job potential of different types of food services. Field trips to a hospital, nursing home, restaurant, and industrial food service operation.

DFT 1020—Food Principles3 Credits

This course is a study of the basic principles of food selection and preparation. Two lecture, two laboratory hours per week.

DFT 1030—Advanced Menu Planning and Quality Food3 Credits

Principles and practices of menu planning and good cookery as related to institutional and commercial food service operations are studied. Consideration is given to nutritional and psychological needs, type of operation, utilization of equipment, and costs.

DFT 1810—Field Experience I3 Credits

One lecture hour per week is devoted to orientation to the health field, the various professions within it and their relationships. Laboratory work consists of approximately 60 hours of supervised observation and practical experience designed to increase student understanding of dietetics as related to hospital dietary department function.

DFT 1820—Field Experience II2 Credits

This course provides approximately 60 hours of supervised observation and practical experience in a health care facility dietary department. It is planned to parallel content of major college courses and bridges the gap between theory and practice. Five laboratory hours per week.

DFT 2110—Food Purchasing and Cost Control3 Credits

Fundamentals of sound purchasing methods based on the analysis of quality food, accepted food standards, availability of food, legal regulations, and recommended ordering techniques. Methods of controlling food costs in relation to budgeting and purchasing.

DFT 2210—Principles of Nutrition3 Credits

Nutritive value and functions of food in the body, including personal and family nutritive requirements.

DFT 2220—Therapeutic Nutrition3 Credits

This course is designed to relate the principles of nutrition to special and abnormal conditions. A study of dietary modification necessary as a result of medical or surgical problems is included. Routine hospital diets are studied and aid in planning modified diets is given.

DFT 2310—Food Systems Administration3 Credits

Management aspects of food service systems: organization, personnel, food and financial.

DFT 2410—Sanitation and Safety3 Credits

Detailed study of the control of bacteria in the food service industry. Good practices in housekeeping, sanitary food handling, and personal cleanliness. Practical problems concerned with protection of health and with prevention of food spoilage and contamination. Importance of safety and accident prevention.

DFT 2810—Field Experience III2 Credits

This course provides approximately 60 hours of supervised observation and practical experience in a health care facility dietary department. It is planned to parallel content of major college courses and is a continuation of a series of supervised field experiences designed to develop practitioner competency. Five laboratory hours per week.

DFT 2820—Field Experience IV3 Credits

This course provides approximately 90 hours of supervised observation and practical experience in a health care facility dietary department. It is planned to parallel content of major college courses and is a continuation of a series of supervised field experiences designed to develop practitioner competency. Seven and one-half laboratory hours per week.

DFT 2830—Field Experience V7 Credits

The student participates in approximately 180 hours of supervised experience in actual working situations on varying shifts in affiliated health care food service. This experience is designed to provide practical application of principles learned. One hour per week is scheduled at the college as a seminar session. One lecture, fifteen laboratory hours per week.

ECONOMICS

ECO 2010—Principles of Economics I3 Credits

Conceptual frame work of the free enterprise society. Quantitative description of the American Economy, facts and figures. Economics of aggregates based on the national income accounting. Microeconomic income determination, employment and price level. Introductory principles of money and banking, the Federal Reserve System and other financial institutions. Monetary and the fiscal policy. Growth of the American economy.

ECO 2020—Principles of Economics II3 Credits

A continuation of economic principles with the special emphasis on microeconomics. An introduction to individual demand. Production planning and the related effect upon market structures, resource allocation, and income distribution; e.g., wages, rent, interest and profits. (Prerequisite: ECO 2010)

ECO 2030—Principles of Economics III3 Credits

A course in applied economics. Anti-trust laws, problems of trade unions and collective bargaining, important labor legislation. Economics of poverty in the United States. Public finance: the role of the government, principles of taxation, shifting and incidence. International trade. Economics of underdeveloped countries, their trade problems, foreign aid. Economics of the collectivist economies. (Prerequisite: ECO 2020)

EDUCATION

EDU 1010—Orientation to the Education of the Exceptional Child . . .3 Credits

This course examines the educational and sociological basis for current educational practices. Site visits and supervised observation acquaint the student with services, settings, teacher and paraprofessional roles.

EDU 1110—Introduction to Early Childhood Education3 Credits

This course deals with the expanding field of early childhood education and care. Differentiation of teaching and supportive roles in early childhood programs is examined. Diverse program sites are visited. Course requirements of readings and child observations highlight characteristics of the young child and of the early childhood educator.

EDU 2010—Introduction to Education3 Credits

A short survey of the field of education in which the history of American education, present philosophies of education, major problems of education, present practices and the school as a social institution are considered.

EDU 2110—Driver and Traffic Safety Education3 Credits

Critical analysis of traffic accidents and causation, attitude factors, essential knowledge of automobile operation and function, and traffic laws and regulations. Includes laboratory experiences to develop skills in driving and operating the automobile, as well as evaluating conditions for safety of the persons involved.

EDU 2310—Audio-Visual Aids3 Credits

This course is designed to develop skill in the use of the mimeograph, ditto, tape recorder, motion picture projector, slide projector, and other audio-visual equipment. Experience in the preparation of visual aids used in the public school system is given.

EDU 2410—Human Growth and Development3 Credits

Course examines human development with emphasis on growth, socialization and general characteristics of developmental stages from infancy through adolescence. The school, home and peer influences are studied. Laboratory observations are required for early childhood education majors.

EDU 2610—Public School Records2 Credits

A study and use of forms and records used in school systems.

EDU 2710—Reading in the Elementary School3 Credits

A beginning course designed to give pre-service teachers an understanding of the content and methods necessary for the operation of a successful developmental reading program in the elementary school. Attention is given to the innovative approaches for teaching reading, factors influencing reading ability, and to a survey of reading skills.

EDU 2730—Diagnostic Teaching of Reading3 Credits

This course is designed primarily to provide the student with those diagnostic skills and prescriptive materials that will enable him/her to meet the needs of those pupils who have difficulties in learning to read in the regular classroom situation. (Prerequisite: EDU 2710 or teaching experience.)

EDU 2810—Child Development from Infancy Through Age Eight . . .3 Credits

This comprehensive study of the child from infancy through eight years examines genetic, biological, social, motor, cognitive aspects of development with implications for early childhood education and related fields. (Prerequisite: EDU 2410)

EDU 2820—Creative Activities and Experiences for Young Children .3 Credits

This course is a study of a creative curriculum for young children with emphasis on the teacher's role in aesthetic experiences in art, music, movement and rhythms. (Prerequisites: ART 1810, EDU 1110 or EDU 2810)

EDU 2910—Prospective Teacher Cooperative Practicum I3 Credits**EDU 2920—Prospective Teacher Cooperative Practicum II3 Credits**

This program is designed to provide the student and local school systems with a cooperative classroom experience. The college student will investigate the duties, responsibilities, and requirements of the teacher's aid profession.

Each assigned classroom teacher will be involved with the evaluation of the student, as well as the College Instructor and Administrator of the school. (Prerequisite: EDU 2910)
(Early Childhood Education and Special Education majors prerequisite: EDU 2410 or EDU 2810.)

EDU 2930—Field Experiences in Early Childhood Education3 Credits
Student is assigned a field placement in nursery, day care, kindergarten or primary grades. Observations, supervised case studies and problems of teachers, methods, materials and school organization are focuses of this course. (Prerequisite: EDU 2910-20) (Early Childhood Education and Special Education majors prerequisite: EDU 2410 or EDU 2810)

ELECTRONICS TECHNOLOGY

- EET 1010—Electric Circuits I3 Credits**
A study of the fundamental principles of circuit analysis, including Ohm's law, Kirchoff's law, Thevinin and Norton's theorems, node and mesh equation analysis and power relations. The response of resistive, capacitive and inductive circuits to both AC and DC sources using phasor notation is also considered.
- EET 1020—Electric Circuits II3 Credits**
A continuation of EET 1010, Electric Circuits I.
- EET 1015—Electric Circuits Lab I1 Credit**
- EET 1025—Electric Circuits Lab II1 Credit**
Laboratory verification of principles introduced in Electric Circuits I and II.
3 hours laboratory
- EET 1110—Electric Fundamentals I3 Credits**
The first course in a two course sequence designed to familiarize the student with the fundamentals of electricity from basic concepts to semiconductors and vacuum tubes. This course is designed for the certificate program or electives for other than Electronics Technology students.
- EET 1120—Electric Fundamentals II3 Credits**
The second course in a two-part sequence designed to familiarize the student with the fundamentals of electricity from basic concepts to semiconductors and vacuum tubes. This course is designed for the certificate program or electives for other than Electronics Technology students: (Prerequisite: EET 1110 or permission of the instructor.)
- EET 1140—Electronic Communications I5 Credits**
- EET 1150—Electronic Communications II5 Credits**
A two-course sequence designed to cover radio receiver and transmitter circuits and systems including AM, FM, SSB, TV, and other communications, circuits and systems. These courses are designed for the certificate program or electives for other than Electronics Technology students. (Prerequisite: EET 1130 or permission of the instructor.)
4 hours lecture—2 hours laboratory

- EET 1160—Industrial Electronics Measurement and Control5 Credits**
 A study of devices, circuits and systems used in electronic measurement and controls in industry. This course is designed for the certificate program or electives for other than Electronics Technology students. (Prerequisite: EET 1130 or permission of the instructor.)
 4 hours lecture—2 hours laboratory
- EET 1210—Materials and Construction Practices2 Credits**
 A laboratory course to familiarize the student with electronic hardware, hand tools and shop practices. Includes layout design of chassis and printed-circuit fabrication processes.
 1 hour lecture—3 hours laboratory
- EET 1310—Electronics I3 Credits**
 A study of electronic device characteristics, basic circuits and biasing techniques. Solid state devices are emphasized.
- EET 1320—Electronics II3 Credits**
 Small signal amplifiers, tuned amplifiers, class A, B, C power amplifiers and basic feedback circuits.
- EET 1330—Electronics III3 Credits**
 A study of communication electronic circuits used in reception and transmission of modulated signals.
- EET 1340—FCC License Preparation3 Credits**
 Preparatory course for those desiring to obtain their first or second class radio-telephone operators license from the Federal Communications Commission.
- EET 1315—Electronics Lab I1 Credit**
- EET 1325—Electronics Lab II1 Credit**
- EET 1335—Electronics Lab III1 Credit**
 Experimental verification of principles introduced in Electronics I, II, III.
 3 hours laboratory
- EET 1410—Electronics Drafting I2 Credits**
- EET 1420—Electronics Drafting II2 Credits**
 Basic drafting practices, use of instruments, theory of projections, and freehand sketching. Methods and principles of graphically presenting electronic information. Covers the principles of circuit layout and introduces the student to electronic symbols employed in electronic circuit schematics.
 1 hour lecture—3 hours laboratory
- EET 1610—Electrical Systems Design I3 Credits**
 This course is a study of the design of electrical service systems for residential, commercial and industrial applications. The student will learn to design electrical systems in accordance with local and national electrical codes. Topics included will be an introduction to electrical codes, types of conductors and cables, safety grounding, overcurrent protection, branch circuits, estimate of loads, and equipment selection. The student will be given practical problems in the layout and design of electrical service systems for residential, commercial and industrial locations. (Prerequisite: EET 1020)

- EET 1620—Electrical System Design II**3 Credits
A continuation of Electrical Systems Design I with emphasis on advanced design problems.
- EET 1630—Elements of Electrical Generation, Transmission and Distribution**3 Credits
A study of the components of electrical power generation, transmission and generation, including transmission law theory and load flow studies.
- EET 1635—Elements of Electrical Generation, Transmission and Distribution Laboratory**1 Credit
Experimental verification of principles introduced in EET 1630.
3 hours laboratory
- EET 1640—Electrical Wiring**4 Credits
Basic principles and practice of modern electrical wiring for residential, commercial and farm installations. Including installation of service entrance and ground, wiring of specific outlets and common switch legs, wiring of heavy appliances, modernization of installation, grounding theory and practice. Requirements of National Electrical Code are emphasized through course.
3 hours lecture—1 hour laboratory
- EET 2210—Electronics Project**1 Credit
The student selects an electronics project: designs, fabricates and tests the finished project. (Prerequisite: EET 1210)
3 hours laboratory
- EET 2250—Special Topics in Electronics**3 Credits
Subject areas in electronics selected by instructor, consistent with present needs of industry.
- EET 2260—Electronic Troubleshooting**4 Credits
A study in the techniques of locating malfunctions in television and other electronic systems in a logical manner.
3 hours lecture—3 hours laboratory
- EET 2310—Digital Electronics I**3 Credits
A study of circuits used in pulse generation, shaping and switching, including couplers, inverters, basic logic circuits and multivibrators.
- EET 2320—Digital Electronics II**3 Credits
A study of binary number system, switching algebra and fundamental computer circuits.
- EET 2315—Digital Electronics I Laboratory**1 Credit
- EET 2325—Digital Electronics II Laboratory**1 Credit
Experimental verification of principles introduced in Digital Electronics I, II.
3 hours laboratory
- EET 2510—Industrial Electronics and Control I**3 Credits
A study of commonly used circuits for industrial applications including phase shifting networks, time delay circuit, digital and analog control circuitry, digital sequence controls with emphasis on relay circuitry. Power control circuits using SCRs, triacs and their triggering circuitry is also covered.
- EET 2520—Industrial Electronics and Control II**3 Credits
A continuation of Industrial Electronics I.

- EET 2515—Industrial Electronics and Control I Laboratory1 Credit**
- EET 2525—Industrial Electronics and Control II Laboratory1 Credit**
 Experimental verification of principles introduced in Industrial Electronics.
 3 hours laboratory
- EET 2530—AC/DC Machines4 Credits**
 A study in the application of electric motors and the proper maintenance of such machines. Control of machines using relays and static logic is also considered.
 3 hours lecture—3 hours laboratory
- EET 2540—Commercial Electronic System3 Credits**
 An examination of the widely employed electronic systems in a commercial environment. Including emergency power systems, security systems and fire and smoke detection systems.
- EET 2560—Electrical Estimation and Pricing3 Credits**
 A study of the estimation procedures for determining the cost of a wide variety of electrical installations in residential, commercial and industrial facilities.

ENGINEERING

- ERG 1010—Engineering Graphics I3 Credits**
 Basic drafting practices, the use of instruments, theory of projections, free hand sketches, the graphic language, and representation of the shape and size of three dimensional objects.
 2 hours lecture—laboratory
- ERG 1020—Engineering Graphics II3 Credits**
 Continuation of Graphics I with experience in working drawings and design drawings, machine, sheet metal, and electrical drawing and space relations of points, lines and plane intersections. (Prerequisite: ERG 1010 or consent of Instructor.)
 2 hours lecture-laboratory
- ERG 1050—Elementary Mechanics3 Credits**
 Statics of particles and rigid bodies resultants of force systems, vector algebra, equilibrium, friction, centers of gravity, centroids, and moments of inertia. (To be taken by special certificate students only.) (Prerequisite: MAT 1050 or MAT 1010 and MAT 1020)
- ERG 1100—Introduction to Engineering3 Credits**
 Introduction to engineering problem solving and computations. Data presentation; error analysis; empirical methods; use of slide rule and elementary computer programming.
- ERG 1110—Applied Mechanics I3 Credits**
 Statics of particles and rigid bodies resultants of force systems, static equilibrium, friction, and moments. (Engineering Technology students only.)
- ERG 1120—Applied Mechanics II3 Credits**
 Dynamics of particles and rigid bodies, kinematics, kinetics, Newton's laws, and impulse-momentum. (Prerequisite: ERG 1110)

- ERG 2010—Engineering Mechanics I**3 Credits
 Statics of particles and rigid bodies resultants of force systems, static equilibrium, friction, and moments. (Prerequisite: MAT 2610 and PHY 2110)
- ERG 2020—Engineering Mechanics II**3 Credits
 Dynamics of particles and rigid bodies, kinematics, kinetics, Newton's laws, and impulse-momentum. (Prerequisite: ERG 2010)
- ERG 2110—Thermodynamics**3 Credits
 Work and kinetic energy; temperature; heat; first law of thermodynamics. (Prerequisite: MAT 2610)
- ERG 2210—Strength of Materials**3 Credits
 Stress; strain; Hooke's Law; extension, torsion, and bending of bars; plastic action. (Prerequisite: ERG 1050 or ERG 1110)

ENGLISH

- ENG 1010—Composition I**3 Credits
 Composition: establishing purpose, organization, paragraph structure, style, grammar and mechanics; reading: for meaning and ways of expressing meaning.
- ENG 1020—Composition II**3 Credits
 Composition: patterns and techniques of development, documentation (preparation of a documented paper); reading: essays and short fiction. (Prerequisite: ENG 1010)
- ENG 1030—Composition III**3 Credits
 Composition: writing based on fiction, drama, and poetry; reading: fiction, drama, and poetry. (Prerequisite: ENG 1020)

NOTE: Composition I, II, and III are prerequisite to Sophomore English. Sophomore English requirements may be met with any two of the five Sophomore Literature courses offered—World Literature I, II, III, or American Literature I or II.

- ENG 2110—World Literature I**3 Credits
 Greek and Roman mythology, drama, epic, history, and philosophy; The Bible; Germanic myth and saga; Beowulf; Dante; Medieval romance; Chaucer; Cervantes. (Prerequisite: ENG 1030)
- ENG 2120—World Literature II**3 Credits
 Survey of world literature from the Renaissance through the Romantic period. Emphasis on Shakespeare, Molière, Voltaire, Swift, Goethe, and the Romantic Poets. (Prerequisite: ENG 1030)
- ENG 2130—World Literature III**3 Credits
 Realism in fiction. Modern poetry and drama. Emphasis on Dostoevsky, Tolstoy, Ibsen, Yeats, Shaw, Sartre, and Solzhenitsyn. (Prerequisite: ENG 1030)
- ENG 2140—American Literature I**3 Credits
 Colonial through 1860. Emphasis on Poe, Hawthorne, Melville, Emerson, Thoreau, and Whitman. (Prerequisite: ENG 1030)

- ENG 2160—American Literature II3 Credits**
From 1860 through modern. Emphasis on Dickinson, James, Clemens, Frost, Hemingway and Faulkner. (Prerequisite: ENG 1030)
- ENG 2310—Children’s Literature3 Credits**
Characteristics and methods of teaching children’s literature.
- ENG 2810—Creative Writing3 Credits**
Theory and practice of the creation of fiction, drama, and poetry by the analysis of models and student manuscripts.
- ENG 2820—Technical Writing3 Credits**
An intensive study in the principles of exposition and practice in writing letters, technical reports, outlines, abstracts, and a research paper related to the student’s field of specialization.

FIRE SCIENCE TECHNOLOGY

- FST 1010—Introduction to Fire Science3 Credits**
A course to acquaint the students with the broad field of Fire Science. Emphasis on some of the problems of the Fire Service with potential or possible solutions.
- FST 1020—Municipal Fire Protection3 Credits**
A study of the typical municipal fire department in Tennessee. The course stresses organization, modern procedures, and urban characteristics.
- FST 1030—Industrial Hazards3 Credits**
A course emphasizing the causes of fires in various types of industries. Explores new techniques and chemicals used in industrial fires.
- FST 1110—Construction Codes and Fire Protection Standards3 Credits**
A study of fire codes and standards. The course includes a study of modern protection equipment and building construction materials.
- FST 1120—Environmental Technology3 Credits**
See course description for Natural Science (NSC) 1120.
- FST 2010—Fire Fighting Strategy3 Credits**
A course illustrating the physical and chemical aspects of fire suppression technology. The student will pursue a detailed study of the chemistry of fire, along with modern methods of fire suppression, tactical decisions and post fire analysis.
- FST 2020—Blue Print Reading3 Credits**
An interpretation of building plans and blueprints. Instructional material includes special problems.
- FST 2110—Inspection Principles and Practices4 Credits**
The course includes the development and philosophy of fire inspection. Emphasis is on inspection techniques, arson investigation, and the development of technical inspection reports.
2 hours laboratory
- FST 2120—Principles of Hydraulics3 Credits**
Surveys the basic laws of hydraulics. Includes a study of the fundamentals of pressures and measurements. Reviews related math and pertinent theorems and formulas.

- FST 2210—Flammable Materials**3 Credits
 Study of chemical characteristics and reactions related to storage, transportation, handling hazardous materials, i.e., flammable liquids, combustible solids, oxidizing and corrosive materials and radioactive compounds. Emphasis on emergency situations and fire fighting and control.
- FST 2220—Water Distribution**3 Credits
 A study in applying the principles of hydraulics to fire fighting problems. Attention is also given to water supply problems.
- FST 2230—Water Suppression Systems**3 Credits
 Study of the required standard for water supply; special hazards protection systems; automatic sprinklers and special extinguishing systems; automatic signaling and detection systems; rating organizations and underwriting agencies.
- FST 2510—Fire Protection Equipment and Systems**3 Credits
 A study of the operation and maintenance of fire apparatus and pumps. Attention is focused on the required standards for water supply as it is related to automatic sprinklers and special extinguishing systems. Includes an analysis of various automatic signaling and detection systems.
- FST 2610—Fire Department Administration**3 Credits
 A detailed study of the Fire Department Organization. Includes fire company organization; the company officer (duties, responsibilities, leadership, supervision); company personnel administration; company communications; company maintenance and training; records and reports; and problem solving.
- FST 2620—Seminar**3 Credits
 A course designed to consolidate the various learning experiences in fire fighting. Emphasis is placed on special problems.
- FST 2700—Practicum**2 Credits
 Practical experience is provided for each student through cooperative agreements with local fire stations. Emphasis is placed on the day-to-day activities of firemen.

FRENCH

- FRE 1010—Beginning French I**3 Credits
 (No prerequisite)
- FRE 1020—Beginning French II**3 Credits
 (Prerequisite: FRE 1010)
- FRE 1030—Beginning French III**3 Credits
 Elementary grammar, pronunciation, and conversation through use of films, videotapes, cassette tapes, filmstrips, and computer programs. (Laboratory required.) (Prerequisite: FRE 1020)
- FRE 2010—Intermediate French I**3 Credits
 (Prerequisite: FRE 1030)
- FRE 2020—Intermediate French II**3 Credits
 (Prerequisite: FRE 2010)

FRE 2030—Intermediate French III3 Credits
 Advanced grammar and conversation through use of films, videotapes, cassette tapes, filmstrips, computer programs and library readings. (Laboratory required.) (Prerequisite: FRE 2020)

GEOGRAPHY

GGY 1010—Physical Geography I3 Credits
 (Atmospheric Environment)

A study of the processes and principles which govern atmospheric activity and world climatic patterns. Subjects of interest include storms (tornadoes, hurricanes, thunderstorms), air pollution, weather modification, and climatic change.

GGY 1020—Physical Geography II3 Credits
 (Earth Physical Systems)

An investigation of the natural environment as a system comprised of landforms, soils, vegetation, and animals, each conditioned by climate. Topics of interest include volcanoes and earthquakes, stream erosion and mountain building, continental drifting and animal distributions, and soil formation and vegetation development. (No prerequisites)

GGY 1030—Introduction to Human Geography3 Credits

An introduction to the basic concepts in human geography, including population, political, cultural, urban, and economic geography. Attention is given to analysis of current world problems and issues.

GGY 2110—World Regional Geography I3 Credits

A geographic survey of North American, with particular emphasis upon current regional problems.

GGY 2120—World Regional Geography II3 Credits

A geographic survey of South America and Europe which seeks to broaden perspectives regarding the world and its peoples.

GGY 2130—World Regional Geography III3 Credits

A geographic survey of the Middle East, Africa, Asia, and Australia which seeks to broaden perspectives regarding the world and its peoples.

GGY 2210—Introduction to Economic Geography3 Credits

A survey of agricultural, mining, manufacturing, transportation and service activities as they effect man's economic life.

GEOLOGY

The geology sequence GEO 1610, 1620, 1630 will offer students another branch of science with which to fulfill curriculum requirements.

It will provide first year training in geology for geology majors and will offer the student a comprehensive one-year geology course in contrast to the current one-quarter earth science offering. (However, NSC 1230—Survey of Earth Science should be continued for students wishing only a brief introduction to geology.)

The GEO 1610, 20, 30 sequence will provide the necessary background in geology in the proposed Mining Conservation Technology Program.

GEO 1610—Physical Geology I4 Credits

The study of materials and structure of the earth. Topics include: identification of common rocks and minerals; the earth's interior as revealed by geophysical methods; processes and results of deformation, plate tectonics. (Prerequisite: Basic knowledge of algebra and geometry.)

3 hours lecture—3 hours laboratory

GEO 1620—Physical Geology II4 Credits

The study of geologic processes in landform development. Topics include: ground water; wind and water erosion; deposition; glaciation; regional geomorphic features. Current problems in economic and environmental geology are discussed. (Prerequisite: GEO 1610)

3 hours lecture—3 hours laboratory

GEO 1630—Historical Geology4 Credits

The study of the earth's history, physical and biological, as interpreted from the rock and fossil records. Topics include: stratigraphy; paleontology; evolution of the North American continent; origin of the earth. (Prerequisite: GEO 1620)

3 hours lecture—3 hours laboratory

GERMAN

GRN 1010—Beginning German I3 Credits

Introduction to the fundamentals of German grammar. Emphasis on vocabulary building and the German case system. (Course presupposes no prior German on the part of the student.)

GRN 1020—Beginning German II3 Credits

Continues to build on skills developed in German 1010. Emphasis on the German verb and tense system. (Prerequisite: GRN 1010 or the consent of the instructor.)

GRN 1030—Beginning German III3 Credits

Completes survey of basic German grammar. The passive voice and the subjunctive. Elementary readings in German. (Prerequisite: GRN 1020 or the consent of the instructor.)

GRN 2010—Intermediate German I3 Credits

GRN 2020—Intermediate German II3 Credits

GRN 2030—Intermediate German III3 Credits

Reading intermediate texts, grammar review, and oral practice. (Prerequisite: GRN 1030 or equivalent.) (Laboratory required.)

HEALTH

HEA 2210—Personal Health3 Credits

A consideration of principles from the natural, biological, social, and behavioral sciences as they may be applied to healthful living. Emphasis on knowledge, attitudes, and practices related to self-direction of health behavior.

- HEA 2310—Safety and First Aid3 Credits**
 Designed to provide knowledge and skills which will enable students to meet the needs of most emergency situations. Personal safety and accident prevention information are also incorporated into the course. Upon satisfactory completion of the course, students will receive the American Red Cross Standard First Aid Certificate.
- HEA 2410—Community Health3 Credits**
 A course designed to give an understanding of basic principles of community health education. Emphasis will be on developing health habits essential to wholesome living.

HISTORY

- HIS 1010—Survey of Western Civilization I3 Credits**
 Analysis of western civilization from classical antiquity to the Reformation with emphasis on the political, social, economic, and religious themes on which western culture is based.
- HIS 1020—Survey of Western Civilization II3 Credits**
 Western civilization from the mid 16th century, beginning with the Wars of Religion, to 1860.
- HIS 1030—Survey of Western Civilization III3 Credits**
 Western civilization from 1860 to the present.
- HIS 2110—Survey of American History I3 Credits**
 European background: Settlement of American colonies, severance of European ties, national development and expansion.
- HIS 2120—Survey of American History II3 Credits**
 Rise of democracy and humanitarianism; sectional controversies; Civil War and reconstruction; rise of big business; postwar social, economic and political changes.
- HIS 2130—Survey of American History III3 Credits**
 Emergence as a world power; Populism and Progressivism; World War I; the search for normalcy; the great depression and the New Deal; World War II and its aftermath; the 1970's and future prospects.

HOTEL-MOTEL-RESTAURANT MANAGEMENT

- HMT 1000—Introduction to Hotel-Motel-Restaurant Management . . .3 Credits**
 The hospitality field, its history, famous people, economic and social importance, and operations are the major areas of emphasis in this course.
- HMT 1010—Hotel-Motel-Front Office Procedure3 Credits**
 This course provides an analysis of various jobs within hotel-motel front office, and procedures involved in registering, accounting for, and checking out guests. Front office promotional and sales practices are also investigated.
- HMT 1110—Hotel-Motel-Restaurant Seminar I3 Credits**
 Study of parliamentary procedure, business etiquette and club activity.
- HMT 1120—Hotel-Motel-Restaurant Seminar II3 Credits**
 A continuation of HMT 1110 with an emphasis on housekeeping problems.

- HMT 1130—Hotel-Motel-Restaurant Seminar III**3 Credits
A continuation of HMT 1110-20 with an emphasis on electrical requirements and equipment.
- HMT 2010—Hotel-Motel-Restaurant Practicum**3 Credits
Required “on-the-job” work experience supplied by the hotel-motel-restaurant industries. Department arranges two hundred hours in a selected job learning program with the employer and makes regular appraisals of learning progress.
- HMT 2110—Food Distribution**3 Credits
A study of the history of the food distribution industry in our free enterprise system. To study the agricultural revolution of food processing; canning meats, frozen foods, dairy, grain, beverage, sugar refining, etc., to study methods of transportation and types of modern food distribution systems.
- HMT 2120—Quality Food Preparation**3 Credits
The emphasis is placed on quantity cookery by department and station. Detailed studies in raw materials, recipes, menu planning, and the use of equipment.
- HMT 2210—Hotel-Motel-Restaurant Accounting**3 Credits
This is a study of accounting applications to various service institutions. Emphasis is placed on operating cost data, cost analyses and methods of reporting for managerial uses.

HUMANITIES

- HUM 2800-2899—Humanities Seminar**3 Credits
This course is designed for those students who are interested in pursuing an in-depth study of some particular fine arts problem.

JOURNALISM

- JRN 1110—Introduction to Mass Communications**3 Credits
A survey course of contemporary mass communications media and agencies: newspapers, magazines, radio, television, film, advertising, public relations, the recording industry, press associations and specialized publications. Emphasis is on the content of the mass media and the effects the media have on society and individual citizens.
- JRN 1510—Journalism Practicum I**1 Credit
- JRN 1520—Journalism Practicum II**1 Credit
- JRN 1530—Journalism Practicum III**1 Credit
Laboratory courses offering practical experience for students working on the student newspaper, yearbook, other campus publications and off-campus publications. Each course carries one hour credit, and students may earn up to six credits by enrolling for one course each quarter.
- JRN 2210—Writing for Mass Media**3 Credits
A general course in writing for major types of mass communications media, with emphasis on news reporting. (Prerequisite: JRN 1110 and typing proficiency, or permission of instructor.)

- JRN 2220—Reporting**4 Credits
Methods of gathering and reporting facts for mass media. Emphasis is on news and news features. Three hours class plus practical assignments which might include work for the campus newspaper. (Prerequisite: JRN 2210 or permission of instructor.)
- JRN 2230—Editing for Mass Media**3 Credits
Copyreading methods and practice in editing copy for print and broadcast media, with emphasis on different types of copy and refinement of writing skills. Assignments might include practical work for the campus newspaper. (Prerequisite: JRN 2220 or permission of instructor.)
- JRN 2510—Supervised Publications Work I**1 Credit
- JRN 2520—Supervised Publications Work II**1 Credit
- JRN 2530—Supervised Publications Work III**1 Credit
- JRN 2750—Introduction to Broadcasting**3 Credits
A broad, basic course covering organization, comparative systems, regulatory and technical aspects of the broadcasting industry.

MATHEMATICS

- MAT 1010—Technical Math I**3 Credits
Algebraic expressions and operations, factoring, fractions, solving one-variable equations, linear and quadratic functions, graphing of functions. Primarily for technology students. Not to be taken in addition to MAT 1050. (Prerequisite: 1 year of high school algebra and geometry or consent of instructor.)
- MAT 1020—Technical Math II**3 Credits
A continuation of MAT 1010, emphasizing systems of equations, exponents and radicals, solving quadratic and radical equations, numerical trigonometry, logarithms, applications. Not to be taken in addition to MAT 1050. (Prerequisite: MAT 1010 or consent of instructor.)
- MAT 1050—Algebra and Trigonometry I**5 Credits
Algebraic expressions and operations, factoring, fractions, solving equations and systems of equations, functions, graphing of functions, numerical trigonometry, logarithms, applications. Not to be taken in addition to MAT 1010 and MAT 1020. (Prerequisite: 1 year high school algebra and geometry or consent of instructor.)
- MAT 1060—History of Mathematics**3 Credits
A study of the development of mathematics and its relation to civilization.
- MAT 1070—Geometry**3 Credits
A study of the most used theorems in plane and solid Euclidean geometry.
- MAT 1110—Introduction to Analysis I**3 Credits
Sets, real numbers, algebraic expressions and operations, equations, inequalities, relations, functions, graphs. (Prerequisite: 2 years high school algebra or 1 year high school algebra and 1 year high school geometry.)
- MAT 1120—Introduction to Analysis II**3 Credits
Average rates, differentiation, integration, applications. (Prerequisite: MAT 1110.)

- MAT 1130—Introduction to Analysis III**3 Credits
Systems of linear equations and inequalities, trigonometric functions, simple and compound interest, exponential and logarithmic functions. (Prerequisite: MAT 1120)
- MAT 1210—Trigonometry**3 Credits
Analysis of functions of angles with their relations, logarithms, and solution of right and general triangles. A calculus sequence student who is lacking in trigonometry background is strongly advised to take this trigonometry course either before or concurrent with MAT 2620. (Prerequisite: 2 years of high school algebra and the consent of instructor.)
- MAT 1310—Symbolic Logic**3 Credits
Logical symbolism, truth tables, propositional calculus, properties of formed systems. (Same as PHL 1310).
- MAT 1500—Pre-Calculus**5 Credits
Designed primarily for students planning to enter calculus, but needing more mathematical background. Topics include sets, real numbers, functions, coordinate geometry, inequalities, exponential and logarithmic functions, trigonometric functions, systems of equations, and the binomial theorem. (Prerequisite: 2 years of high school algebra or MAT 1050 or MAT 1010, MAT 1020.)
- MAT 2310—Concepts of Mathematics I**3 Credits
Sets, language and rules for operation, history of early number systems, relations and functions, the system of whole numbers. Designed for elementary and secondary education majors. It is desirable, but not required, that the student have had high school algebra and/or geometry.
- MAT 2320—Concepts of Mathematics II**3 Credits
Algorithms for whole numbers, systems of integers and rational numbers, decimals, percentages, number theory, irrational numbers, some basic algebra. A continuation of MAT 2310, designed for elementary and secondary education majors. (Prerequisite: MAT 2310)
- MAT 2330—Concepts of Mathematics III**3 Credits
Interest problems, plane and solid geometry, The Metric System, basic statistics, and basic symbolic logic. A continuation of MAT 2320, designed for elementary and secondary education majors. (Prerequisite: MAT 2320)
- MAT 2510—Elementary Statistics**3 Credits
An introduction to elementary methods and techniques. Topics covered include sampling, frequency distributions, elementary probability, binomial distributions, normal distributions, null hypothesis, rank correlation, significance of data. A statistical project of an elementary nature including collecting, presenting and interpreting data is required. Primarily for computer technology and accounting technology majors. (Prerequisite: A college level algebra course or consent of the instructor.)
- MAT 2550—Probability and Statistics**3 Credits
Elementary theory of probability; frequency and density functions; expected values and variances. Emphasis is on probability distributions and fundamental concepts of statistical inference. Should be taken by students who intend to continue with statistical applications in a later course. Primarily for majors in mathematics, science, and business administration transfer programs. (Prerequisite: MAT 1130 or 2610.)

- MAT 2610—Calculus and Analytic Geometry I5 Credits**
 Rate of change, limits, continuity, differentiation, applications of the derivative, introduction to integration. (Prerequisite: 2 years high school algebra, 1 year high school geometry, 1 year high school advanced math or MAT 1500 or consent of instructor.)
- MAT 2620—Calculus and Analytic Geometry II5 Credits**
 Application of the definite integral, transcendental functions, integration, determinants and linear equations. (Prerequisite: MAT 2610)
- MAT 2630—Calculus and Analytic Geometry III5 Credits**
 Plane Analytic Geometry, hyperbolic functions, polar coordinates, vectors and parametric equations. (Prerequisite: MAT 2620)
- MAT 2640—Calculus and Analytic Geometry IV5 Credits**
 Solid Geometry and vectors, partial differentiation, multiple integrals and infinite series. (Prerequisite: MAT 2630)
- MAT 2650—Linear Algebra3 Credits**
 Euclidean n-space, linear independence, basis, inner product, cross product, norm, systems of linear equations, matrices and elementary matrix operations, characteristic equation and eigenvalues, introduction to linear functions and vector spaces. (Prerequisite: MAT 2620)
- MAT 2710—Differential Equations5 Credits**
 A study of the solution of ordinary differential equations, first order equations, linear equations of any order, series solutions and applications. (Prerequisite: MAT 2620)

MECHANICAL TECHNOLOGY

- MET 1010—Manufacturing Processes I3 Credits**
 This course is designed to provide a background of knowledge covering the various manufacturing materials and the fundamental types of manufacturing methods as employed in cold working processes. Through lecture, demonstration, and practical applications the student is given the opportunity to become familiar with the various types of machine tools, tooling, measuring, and inspection procedures. Automation is introduced and information is presented to acquaint the student with the modern practices of numerical control for machine tools and the uses of transfer and special machines.
 2 hours lecture—3 hours laboratory
- MET 1020—Manufacturing Processes II3 Credits**
 This course is designed to provide a background of knowledge covering the various manufacturing materials and the fundamental types of manufacturing methods as employed in hot working processes. Through lecture, demonstration, and discussion the student becomes familiar with the various types of welding processes and their applications, with special machining operations such as ultrasonic, electrical discharge, electroarc, and chemical milling, and with bonding practices and the use of adhesives in modern manufacturing. Some emphasis is also given to metallurgical practices and procedures. Practical experience is gained by the student in performing simple arc and oxyacetylene welding operations, in producing simple molds, cores, and castings, and in basic heat treating, inspection, and testing, using both destructive and nondestructive methods.
 2 hours lecture—3 hours laboratory

MET 1110—Materials of Industry3 Credits

Modern industry utilizes a variety of engineering materials with which the student in mechanical technology must be familiar. A study is made of the five general classifications of materials and their application to industrial uses. Special emphasis is given to new materials which have been developed through technological advances.

MET 1210—Industrial Organizations and Institutions3 Credits

A description and analysis of roles of labor and management in the economy. Approximately one-half of the classroom time is devoted to labor-management relations, including the evolution and growth of the American labor movement and the development and structure of American business management. A study is made of the legal framework within which labor-management relations are conducted and the responsibilities of each in a democratic system of government. The second half of the course pertains to labor economics as applied to the forces affecting labor supply and demand, problems of unemployment reduction and control, and wage determination on the national, plant, and individual levels. Emphasis centers upon current practical aspects of our industrial society with historical references intended only as background material to interpret trends and serve as points of departure.

MET 1310—Hydraulics and Pneumatics3 Credits

A study of the basic components of hydraulic and pneumatic systems and how they are combined to build up various circuits. The emphasis is on the use of hydraulics and pneumatics for power transmission and for control purposes. Both areas are treated as basic sciences with emphasis on mathematical analysis and the scientific method. It is recommended that individual term problems requiring a significant amount of handbook design be required for this course.

2 hours lecture—3 hours laboratory

MET 1510—Air Conditioning and Refrigeration I3 Credits**MET 1520—Air Conditioning and Refrigeration II3 Credits**

A two course sequence. Design and layout of heating and air conditioning systems, (hot water, steam warm air, radiant, electrical and solar), basic principles in determining heat gain and heat losses in structures, selection and use of equipment for year-round conditioning.

MET 2010—Piping Drafting3 Credits

Fundamental principles of designing pipe systems, including development of diagrams, arrangements and schemes with information concerning standards and specifications of the components in typical systems.

1 hour lecture—6 hours laboratory

MET 2110—Machine Design3 Credits

A course in which the design principles of manufacturing elements are taken up and calculations are made in determining the size and shape of various machine parts. It includes factors which influence the selection of materials to be used in designing such elements as beams, bearings, clutches, brakes, shafts, bushings, screens, rivets, gears, belts, and fly wheels. Attention is given to various types of loading conditions, stresses, deformations, fits, finishes, and other factors which must be considered in the design of machine elements.

MET 2210—Basic Tool Design4 Credits

Lectures, classroom discussion, and actual drawing practice are combined to help the student gain knowledge and experience necessary to design tools commonly used in modern manufacturing. The work consists of designing and laying out cutting tools, gauges, simple jigs, fixtures, and dies. Mass production methods are discussed so that the student may apply the information gained in the practical work of tool designing.

1 hour lecture—6 hours laboratory

MET 2310—Design Problems4 Credits

Opportunities in advanced drafting room practices are offered in this course. The student applies his knowledge of mathematics, science, and drawing to practical problems while he is designing complete machines or component parts of machines. He analyzes the problem, gathers data, sketches ideas on paper, does all necessary mathematical calculations, makes working drawings, and finally checks his work. Throughout the course he is encouraged to use his judgment and work on his own initiative.

1 hour lecture— 9 hours laboratory

MET 2410—Methods and Operations Analysis4 Credits

Understanding of the techniques used in determining the best way of doing a specific piece of work is developed through the systematic study of methods, materials, tools, and equipment for the purpose of finding the most economical way of doing the work, standardizing the methods and procedures to be used, and determining the time required by an average worker to perform the various tasks. Laboratory activities include the analysis of the fundamental physical motions, the construction of various charts, the practice of dividing operations into elementary and time study observations. Additional experience is gained in recognizing and giving value to foreign elements, allowances, and performance rating, and in calculating average cycle time, minimum observations, and standard times.

3 hours lecture—3 hours laboratory

MET 2510—Statistics and Quality Control3 Credits

An elementary approach to the statistical techniques used in the control of the quality requirements of manufactured articles. The course is primarily intended for those who have had no previous experience. The entire course is woven around a core which consists of the application of formulas and control charts. The main objectives covered include sampling inspection techniques, use of inspection tools and instruments, construction and interpretation of control charts for variables, defects, and fraction defective. Concentrated effort is put on the relationship of theoretical concepts to practical manufacturing operations and processes so that assignable causes and weaknesses in a process can be readily isolated and recognized.

2 hours lecture—3 hours laboratory

MET 2610—Plant Layout and Materials Handling4 Credits

Emphasis is placed upon the relationship between good plant layout and efficient materials handling. Evaluation of the site and planning of the factory building are done with consideration of transportation, shipping and receiving, power, heat, light, and air conditioning. Selection and arrangement of production machinery, product and process layout schemes, techniques of making layouts, and balance and flexibility of operations are discussed. Study

is also made of the basic packaging and materials protection methods along with consideration of the specific types of equipment used in the movement of incoming, in-process, storage, and waste materials.

3 hours lecture—3 hours laboratory

MET 2710—Process Planning4 Credits

A comprehensive study of the fundamental principles, practices, and methods of process planning. The responsibilities and range of activities normally associated with process planning are surveyed; also the relationship of process planning to other manufacturing functions in the course is made meaningful by reference to concrete examples, interpretation of charts, operation analysis, and routing forms. Student participation is provided through selected case problems having single or multiple solutions. Additional classroom activities include the actual process planning of selected jobs in terms of description and sequence of operations, set-up time estimating, feed and speed calculations, process and machinery selection.

3 hours lecture—3 hours laboratory

MET 2810—Production Problems4 Credits

A detailed study is made of various production activities and the problems associated with them. Problems and cases are solved through the use of available data in texts and engineering handbooks. Discussion of each topic begins with a consideration of the nature of the problem and continues with a presentation of the detailed approach to be employed in its solution. Some problems deal with the analysis of the elements of production scheduling. Others deal with methods of determining production costs in terms of labor, material, and burden. Balancing work stations on production lines by graphic, as well as mathematical means to achieve constant flow and calculating machine capacities to establish completion dates, represent a major portion of the laboratory work.

1 hour lecture—9 hours laboratory

MEDICAL RECORDS

MRT 1010—Medical Records I3 Credits

Introduction to the history of medicine, the hospital and medical records. Lecture and classroom laboratory experience which will enable the student to be familiar with the purposes, content, and uses of the medical record. Laboratory practice in the analysis and assembly of medical records. (Prerequisite: Permission from Program Director.) (Corequisite: MRT 1210)

MRT 1020—Medical Records II3 Credits

Orientation to the methods of numbering, systems of filing, microfilming and the retention of medical records. Lecture and classroom laboratory practice in the methods of compiling hospital statistics, both manually and by computer. Laboratory practice in gathering statistics and working with formulas to compile actual reports and computer abstracting. (Prerequisite: MRT 1010) (Corequisite: MRT 1220)

MRT 1030—Medical Records3 Credits

Introduction to the disease and operation classification and the indexes maintained in the medical record department. Instruction in SNDO as a nomenclature and laboratory practice in the coding and indexing by ICDA.

Legal aspects of medical records are introduced. Special attention is given to consents, authorizations, release of information and handling medical records in court. (Prerequisite: MRT 1020) (Corequisite: MRT 1230)

MRT 1210—Medical Terminology I3 Credits
 Introduction to the principles of medical terminology and the use of word elements as building blocks for medical terminology. (Corequisite: MRT 1010)

MRT 1220—Medical Terminology II3 Credits
 Further study of medical terminology with emphasis on terminology as it relates to the systems of the body. (Corequisite: MRT 1020) (Prerequisite: MRT 1210)

MRT 1230—Medical Transcription3 Credits
 Additional study in medical terminology in conjunction with medical transcription. Lecture and actual practice in transcription will be coordinated. Practice transcription will include X-ray reports, medical history, physicals and summaries plus operative reports. Emphasis will also be given to the management of the steno pool, incentive pay plans, training methods, etc. (Corequisite: MRT 1030) (Prerequisite: MRT 1220)

MRT 2310—Directed Practice I3 Credits
 Actual practice under the direction of a Medical Record Practitioner in a local hospital department. Orientation to the admitting office and medical record department. Practice in the admitting and discharge procedure plus filing methods. (Prerequisite: MRT 1030) (Corequisite: MRT 2410)

MRT 2320—Directed Practice II3 Credits
 Hospital practice in coding and indexing and in statistical compilation and reports. Actual practice in the release of information. (Prerequisite: MRT 2310) (Corequisite: MRT 2420)

MRT 2330—Directed Practice III3 Credits
 Hospital practice in medical transcription and other secretarial skills. Attendance at various medical meetings, minute taking and contact with the medical staff. (Prerequisite: MRT 2320) (Corequisite: MRT 2430)

MRT 2410—Advanced Medical Records3 Credits
 Special attention is made to the requirements of accrediting agencies plus new trends in medical records. Emphasis is placed on new government laws and regulations. Special instruction in audit and Utilization Review. (Corequisite: MRT 2310)

MRT 2420—Office Supervision for the Medical Record Supervisor . . .3 Credits
 Introduction to the field of organization and management plus personnel management. Instruction in office arrangement and design and equipment selection. Laboratory experience in organization charts, procedure manuals, budgets, and equipment purchasing. (Corequisite: MRT 2320)

MRT 2430—Medical Records Seminar3 Credits
 This quarter will be devoted to individual research projects to the group for evaluation. (Corequisite: 2330)

MILITARY SCIENCE (ROTC)

- MS 1110—Fundamentals of Military Leadership and Management . . .3 Credits**
 A study of the development of American military institutions, policies, experiences and traditions in peace and war from colonial times to the present. Historical examples of effective and ineffective leadership and application of the principles of war. Practical exercises in leadership development.
- MS 2110—Applied Military Leadership and Management I3 Credits**
 Concentrated study of leadership. Factors which affect human behavior. Leadership functions, principles, and traits. Development of leadership qualities through practical exercises. Military teaching principles and development of teaching skills. (Prerequisite: MS 1110)
- MS 2120—Applied Military Leadership and Management II3 Credits**
 The contemporary world scene and its impact on the military. Planning, preparation and presentation of briefings and continued development of leadership skills through practical exercise. Discussion of the ROTC Advanced Course. (Prerequisite: MS 2110)

NOTE: Additional information concerning the Army Reserve Officer's Training Corps (ROTC) program may be obtained from a guidance counselor or the ROTC instructor.

MUSIC

THEORY AND LITERATURE

- MUS 1010—Music Appreciation3 Credits**
 Open to all students who desire a better understanding of music. In this one-quarter course music of the popular culture as well as traditional art music will be explored through class lecture as well as weekly listening assignments.
- MUS 1020—Fundamentals of Music3 Credits**
 A beginning study of music, its terminology, and elements such as notes, scales, intervals, keys, triads, meter and smaller forms. Designed to acquaint the student with notation, the keyboard, sight singing, and ear training. Offered for non-music majors or for remedial study for music majors.
- MUS 1110—Beginning Theory I4 Credits**
- MUS 1120—Beginning Theory II4 Credits**
- MUS 1130—Beginning Theory III4 Credits**
 Ear training, sight singing, dictation, rhythmic reading, harmonic analysis, written and keyboard harmony, two voice counterpoint, homophonic forms, standard vocabulary of chords and inversions. Must be taken in sequence.
 3 hours lecture—2 hours laboratory
- MUS 2010—Introduction to Music Literature I2 Credits**
 Designed to give the student a thorough grounding in music of Western civilization from antiquity through the Renaissance. Students learn through class lecture, listening assignments, concert attendance and performance of representative literature.

- MUS 2020—Introduction to Music Literature II2 Credits**
 A continuation of MUS 2010, beginning with the Baroque era and continuing through the Classic era.
- MUS 2030—Introduction to Music Literature III2 Credits**
 A continuation of MUS 2020, dealing with the music of the nineteenth and twentieth centuries.
- MUS 2110—Advanced Theory I4 Credits**
- MUS 2120—Advanced Theory II4 Credits**
- MUS 2130—Advanced Theory III4 Credits**
 Four-part harmony using secondary dominants, modulation, harmonic analysis, sight singing, ear training, melodic and harmonic dictation, and keyboard harmony. Neapolitan and augmented sixth chords, diminished sevenths and other chromatic harmonies; analysis of early 19th century works; the sonata form. Further studies of musical forms, analysis of 19th and 20th century works, serial composition, and original composition. Three and four voice counterpoint, part writing, figured bass, binary and ternary forms. Must be taken in sequence.

APPLIED MUSIC: ENSEMBLES

Non-music majors are invited to participate in as many of the music courses as possible, particularly chorus and band. Membership for all ensembles is by permission of the director. Members are expected to attend all rehearsals and performances. Failure to do so will result in dismissal from the ensemble and a failing mark for the quarter.

- MUS 1050—Chorus1 Credit**
 Meets three hours per week. The official choral organization of the College. Performs standard repertoire and selections suitable for use with school and church choirs.
- MUS 1060—Madrigal Singers1 Credit**
 Participation in the group in all phases, including rehearsals and appearances. Reading of early English Madrigals and traditional American music. Admittance by audition. Meets three hours per week.
- MUS 1070—Small Instrumental Ensembles1 Credit**
 String, brass, and woodwind ensembles will rehearse three hours per week and perform twice during a quarter. Classical literature for standard instrumentations will be emphasized. Rehearsal times arranged according to students' schedules. Assignment of groups to be determined by instructor.
- MUS 1080—Concert Band1 Credit**
 Performs traditional and contemporary wind ensemble literature. Open to all qualified students. Meets three hours per week.
- MUS 1090—Jazz Band1 Credit**
 Membership by audition only. Performs arrangements for jazz, "big band," and studio band in contemporary and jazz-rock styles. Improvisation is encouraged, but not required. Performances regularly scheduled off-campus, as well as for student body.

APPLIED MUSIC: CLASS INSTRUCTION

Class piano or class voice is offered for secondary, applied or non-music majors.

MUS 1510—Class Lessons in Voice I1 Credit

MUS 1520—Class Lessons in Voice II1 Credit

MUS 1530—Class Lessons in Voice III1 Credit

Group instruction in basic techniques of breath control, tone production, diction, phrasing and interpretation using simple song repertoire, with suggested songs suitable for solos. A study of the vocal instrument and stage presence will be included. Meets twice weekly. Daily practice required. Not for the student whose major is voice.

MUS 1610—Class Piano I1 Credit

MUS 1620—Class Piano II1 Credit

MUS 1630—Class Piano III1 Credit

Group instruction in basic keyboard technique for students with no prior training in piano. Electronic pianos will be used. Meets twice per week. Daily practice required.

APPLIED MUSIC: INDIVIDUAL INSTRUCTION

Private lessons in voice, organ, piano, or other instruments may be taken each quarter for one or two quarter hours credit. Any student may take private lessons, but only students performing at the college level will receive academic credit. Scheduling preferences will be given to full-time music majors. Students receive 25 minutes of private instruction per week per quarter hour of credit. Any student may take applied music instruction in a minor area. Such courses will be designated by an "M" following the course number.

Requirements include appearance in solo classes and performance before a faculty jury at the close of each quarter. A recital is required for music majors in their applied major field during their second year of study. All students taking applied music are required to attend all solo classes and other selected performances. The music department reserves the right to request qualified students to participate in recitals and other musical programs for the benefit of the College and the community. A minimum of ten hours practice per week is required.

MUS 1211-21-31—Individual Instruction in Brass Instruments1 Credit

MUS 2211-21-31—Individual Instruction in Brass Instruments1 Credit
(One lesson per week)

MUS 1212-22-32—Individual Instruction in Brass Instruments2 Credits

MUS 2212-22-32—Individual Instruction in Brass Instruments2 Credits
(Two lessons per week)

MUS 1311-21-31—Individual Instruction in Woodwinds1 Credit

MUS 2311-21-31—Individual Instruction in Woodwinds	1 Credit
(One lesson per week)	
MUS 1312-22-32—Individual Instruction in Woodwinds	2 Credits
MUS 2312-22-32—Individual Instruction in Woodwinds	2 Credits
(Two lessons per week)	
MUS 1411-21-31—Individual Instruction in Strings	1 Credit
MUS 2411-21-31—Individual Instruction in Strings	1 Credit
(One lesson per week)	
MUS 1412-22-32—Individual Instruction in Strings	2 Credits
MUS 2412-22-32—Individual Instruction in Strings	2 Credits
(Two lessons per week)	
MUS 1511-21-31—Individual Instruction in Organ	1 Credit
MUS 2511-21-31—Individual Instruction in Organ	1 Credit
(One lesson per week)	
MUS 1512-22-32—Individual Instruction in Organ	2 Credits
MUS 2512-22-32—Individual Instruction in Organ	2 Credits
(Two lessons per week)	
MUS 1711-21-31—Individual Instruction in Piano	1 Credit
MUS 2711-21-31—Individual Instruction in Piano	1 Credit
(One lesson per week)	
MUS 1712-22-32—Individual Instruction in Piano	2 Credits
MUS 2712-22-32—Individual Instruction in Piano	2 Credits
(Two lessons per week)	
MUS 1911-21-31—Individual Instruction in Voice	1 Credit
MUS 2911-21-31—Individual Instruction in Voice	1 Credit
(One lesson per week)	
MUS 1912-22-32—Individual Instruction in Voice	2 Credits
MUS 2912-22-32—Individual Instruction in Voice	2 Credits
(Two lessons per week)	

NOTE: The student may receive credit for one full year's Individual Instruction on each level: one thousand level courses and two thousand level courses.

NATURAL SCIENCE

These natural science courses are designed to provide the student a brief exposure to various disciplines in the natural sciences. They assume little or no background in either mathematics or science, and are therefore suitable for the non-scientist. The courses have no prerequisites and may be taken individually or in any sequence. Each course meets for three hours lecture and two hours laboratory per week.

These courses may be used to satisfy the natural science requirement in the Associate of Arts or Associate of Science degree programs in art, music, business, and education. They may also be taken for general elective credit in most curricula; as such, they can also be used to aid the student in choosing a field of study or in preparing himself for additional science courses. However, these courses will not satisfy any part of the science requirements in chemistry, mathematics, physics, pre-engineering, pre-dentistry, pre-pharmacy, pre-medicine, pre-nursing, physical therapy, respiratory therapy, or medical technology.

NSC 1010—Physics for the Layman4 Credits

An introductory survey of selected topics in physics, treated on a descriptive level with a minimum of mathematics. The course concentrates on fundamental concepts and principles rather than technical applications. Topics will include the following: classical laws of motion; universal gravitation; theory of relativity; sound, music, and acoustics; light and optics; energy forms and transformations; electromagnetism; atomic and nuclear physics. The laboratory is designed to illustrate and reinforce the lecture discussions and to emphasize the role of experiment in science. (No credit is given to any student who has successfully completed PHY 2010 or PHY 2110.)

3 hours lecture—2 hours laboratory

NSC 1120—Environmental Science4 Credits

A course which takes an ecological approach in analyzing the impact of human activities upon natural systems. Attention is given to scientific resource management principles in such areas as forestry, wildlife, soils, and water. Field observation and monitoring exercises are included in the laboratory sessions.

3 hours lecture—2 hours laboratory

NSC 1230—Survey of Earth Science4 Credits

An introductory course designed to provide an exposure to the basic principles of physical and historical geology. Subjects considered include the nature of the earth's crust, geological processes, the geologic time scale, and paleontology. (No credit is given to any student who has successfully completed GGY 1020 or any geology course.)

3 hours lecture—2 hours laboratory

NSC 1310—Chemistry for the Changing Times4 Credits

An introduction to chemistry and the role it plays in our society and life style. Topics will include: chemistry and society; composition and characteristics of materials such as food, water, drugs, plastics, detergents, vitamins and poisons; pollution and pollution control; nuclear energy. (No credit is given to any student who has successfully completed CHE 1010 or CHE 1110.)

3 hours lecture—2 hours laboratory

NSC 1410—Survey of Astronomy4 Credits

A descriptive survey of the major areas of astronomy. Topics include the following: the earth-moon system; the sun and the solar system; recent discoveries concerning the planets; the nature of stars; galaxies; ancient and current theories of the universe. Laboratory experiences will include naked eye and telescopic viewing of the heavens.

3 hours lecture—2 hours laboratory

NSC 1520—Atmospheric Science4 Credits

Emphasis is directed toward an understanding of meteorologic processes which produce various features of world climate, such as thunderstorms, rainfall, hail, and wind. Laboratory exercises are designed to familiarize the student with the collection and handling of climatic data, and to provide practice in analyzing weather maps. (No credit is given to any student who has successfully completed GGY 1010.)

3 hours lecture—2 hours laboratory

NSC 1670—Special Topics in the Sciences4 Credits

Courses dealing with special areas of natural science which may be offered on occasion. Possible topics include the history of science, oceanography, soil science, plant science, and life science. Appropriate field and laboratory exercises will comprise the laboratory sessions.

3 hours lecture—2 hours laboratory

NUCLEAR TECHNOLOGY

NUC 1010—Introduction to Nuclear Technology3 Credits

A survey of nuclear science at the introductory level. Topics include nuclear physics, reactors, nuclear hazards and safety.

NUC 2010—Nuclear Physics3 Credits

Nuclear structure and stability; radioactive decay; nuclear reactions; fission and fusion; reaction cross-section; nuclear energy.

NUC 2110—Radiation Biology3 Credits

Biological effects of radiation; permissible levels of exposure; radiation in the environment; food chains; radiation units and dosimetry. (Prerequisite: NUC 2010)

NUC 2120—Radiation Protection3 Credits

Radiation detection and monitoring; attenuation and shielding; handling of radioactive materials; reactor safety. (Prerequisite: NUC 2010)

NUC 2310—Reactor Analysis and Design3 Credits

Fission chain reactions; neutron diffusion; reactor dynamics; control systems; basic reactor types and designs. (Prerequisite: NUC 2010)

NUC 2510—Nuclear Laboratory3 Credits

Instruction and practice in safe handling techniques; calibration and use of health physics instruments; nuclear detection systems, radioactive decay analysis; radioisotope production and use; shielding. (Prerequisite: NUC 2010) Six hours laboratory per week.

NUC 2710—Radioisotopes3 Credits

Production and properties of isotopes, scientific and industrial applications. (Prerequisite: NUC 2010)

OPERATING ENGINEERING TECHNOLOGY

OET 1010—General Introduction to Operating Engineering and History of the Labor Movement2 Credits

Emphasis is placed on history of the labor union movement.

- OET 1020—Introduction to General Construction Power Sources2 Credits**
 To provide the trainee with basic knowledge relevant to 2-stroke cycles and 4-stroke cycle internal combustion engines; operation of gasoline and diesel engines; a basic understanding of the combustion process and the hardware involved in providing clean air for combustion needs; and familiarize the student with the problems involved in eliminating waste heat from the engines, and the methods required to overcome these problems.
- OET 1030—Basic Engineer Power Trains and Undercarriages2 Credits**
 Provides a basic knowledge of mechanical power transmission and the rolling and carrying components of heavy construction equipment, and gives the trainee some understanding of the component parts, capabilities and limitations.
- OET 1040—Introduction to Basic Electricity, Hydraulics
 and Pneumatics3 Credits**
 To provide the trainee with a basic knowledge of electricity and the knowledge to perform checks and preventive maintenance on electrical motors and basic circuits. Also provides a general knowledge of the principles of hydraulics to include definitions, advantages, relationship of pressure and force, and its everyday applications.
- OET 1110—Apprenticeship Field Experiences I4 Credits**
- OET 1120—Apprenticeship Field Experiences II4 Credits**
- OET 1130—Apprenticeship Field Experiences III8 Credits**
 Field Course (On the job training, continuous learning, practicum). The program will consist of about 500, 500, 1,000 hours respectively of fairly consistent employment with one or more general contractors. The work program must meet the standards of the IU OE. The students will be under the supervision of a journeyman, or higher, employed by the contractor, a member of the joint committee, IUOE and a college representative.
- OET 1210—Introduction to Fuels, Oil, and Lubricants2 Credits**
 To provide the trainee with an understanding of the type of fuels, oils, and lubricants used in the heavy construction industry, how and when they are used, and how to achieve best results from their use.
- OET 1220—General Introduction to Welding, Rigging, Soils and
 Compaction2 Credits**
 A general knowledge of the principles, capabilities, and application of oxyacetylene, electric arc, and heliarc welding, and also the application of rigging.
- OET 1230—Function of Grades and Grade Stakes2 Credits**
 To teach the trainee the basic reason for moving earth, the basic nomenclature of roads, airfields, dams, levies, drainage projects, railroads, and the types, purposes, and use of grade stakes.
- OET 1240—Introduction to Construction Equipment2 Credits**
 To acquaint the trainee with the types of construction equipment and with the utilization, capabilities, and limitations of each type.
- OET 2010—Earth-moving Equipment2 Credits**
 To provide the trainee with detailed information on earth-moving and hauling equipment. To teach the controls, operation and operator maintenance of all types of earth-moving equipment.

- OET 2020—Grades and Plans for Operating Engineers2 Credits**
To provide the trainee detailed information on the engineer function and the operating engineers activities on construction projects.
- OET 2030—Mining and Tunneling Equipment2 Credits**
To provide the trainee detailed information on mining and tunneling equipment and its operation.
- OET 2110—Electrical Systems and Electronics2 Credits**
To provide the trainee detailed information on the operation and uses of electrical systems used on and around heavy construction equipment.
- OET 2120—Material Processing and Application4 Credits**
To provide the trainee detailed information on all types of construction material, how it is processed, and procedures used in application of construction material.
- OET 2130—General Construction Equipment, Structure of Components, Seals, and Sealants4 Credits**
To provide the trainee detailed information on the operation, operator maintenance, and uses of general construction equipment. To teach the controls, operation, and operator maintenance of general construction equipment used on construction sites. To provide the trainee detailed information on the structure of components of heavy construction equipment, and seals and sealants.
- OET 2210—Paving Equipment2 Credits**
To provide the trainee detailed information on all types of paving equipment. To teach the controls, operation, and operator maintenance on all types of paving equipment.
- OET 2220—Revolving Shovel and Crane Equipment2 Credits**
To provide the trainee detailed information on revolving type construction equipment. To give specific details on nomenclature and description, uses, servicing, preventive maintenance, minor repairs, uprighting and recovery, moving, shipping, storage, special tool requirements, minor adjustments to components, vehicle codes, accessories and safety. To teach the operation of revolving shovel and crane type equipment.
- OET 2230—Repair and Rebuilding of Internal Combustion Engines . . 2 Credits**
To provide the trainee detailed information on the repair and rebuilding of engines used in heavy construction equipment and in support equipment.
- OET 2240—Crushing, Screening, and Washing Plants4 Credits**
To provide the trainee detailed information on crushing, screening, and washing plants. To teach the controls, operation, and operator maintenance of aggregate crushing, screening, and washing plants.
- OET 2310—Tools, Parts, and Housekeeping2 Credits**
To provide the trainee detailed information on tools and shop equipment used in the repair of heavy equipment, on orders and reports required on the inventory control of parts and tools, on cleaning and inspecting parts, and on housekeeping and safety around repair shops.
- OET 2320—Concrete Plants4 Credits**
To provide the trainee detailed information on the controls and operation of concrete batch plants. To teach the controls, operation, and operator maintenance of concrete plants.

- OET 2330—Material Hoisting and Handling Equipment2 Credits**
To provide the trainee detailed information on operation and use of material hoisting and handling equipment. To give specific details on nomenclature and description, uses, servicing, PM, minor repairs, storage, shipping, special tool requirements, minor adjustments to components, accessories, and safety. To teach the operation of material hoisting and handling equipment.
- OET 2410—Repair of Hydraulic Systems and Pneumatic Equipment .4 Credits**
To provide the trainee detailed information on the repair of hydraulic systems and pneumatic equipment used on heavy duty construction equipment and support equipment.
- OET 2420—Heavy Duty Component Repair4 Credits**
To provide the trainee detailed information on the repair of all components of heavy construction equipment.
- OET 2540—Apprenticeship Field Experiences IV9 Credits**
- OET 2550—Apprenticeship Field Experiences V9 Credits**
Field Course (on the job training, continuous learning, practicum). The program will consist of about 2,000 hours each of fairly consistent employment with one or more general contractors. The work program must meet the standards of the IUOE. The students will be under the supervision of a journeyman, or higher, employed by the contractor, a member of the joint committee, IUOE, and a college representative.

PHILOSOPHY

- PHL 1010—Introduction to Philosophy3 Credits**
A study of problems that confront man as he deals with knowledge and the nature of the world and his interaction with it.
- PHL 1110—Elementary Logic3 Credits**
Study of the principles of reasoning, deductive and inductive fundamentals, and the use of logic as a practical tool.
- PHL 1210—Elementary Ethics3 Credits**
Critical analysis of the principal ethical theories and their application to the problems of life.
- PHL 1310—Symbolic Logic3 Credits**
Logical symbolism, truth tables, propositional calculus, properties of formal systems. (Same as MAT 1310)
- PHL 2010—Religions and Culture: Religions in History3 Credits**
Introduction to the study of religion through selected historical traditions, East and West.
- PHL 2020—Religion and Culture: Contemporary Issues3 Credits**
Introduction to the study of religion through selected religious problems and alternatives in the modern and post-modern world.

PHYSICAL EDUCATION

- PED 1000, 1001, 1002, 1003, 1004, 1005—Adaptive Physical Education 1 Credit**
Modified physical activity designed for students with physical limitations. Students are enrolled in these courses on advice of their physician.
- PED 1010—Physical Conditioning1 Credit**
This course is designed for those interested in improving or maintaining physical fitness.
- PED 1110—Archery1 Credit**
Introduces the student to archery through a brief study of its history with emphasis on the fundamentals of shooting the bow.
- PED 1210—Badminton1 Credit**
Instruction and practice in the fundamentals of badminton.
- PED 1310—Basketball1 Credit**
Practice of fundamentals as well as the various types of play.
- PED 1320—Advanced Basketball1 Credit**
A continuation of PED 1310. Emphasis on skill, strategy, and competition. (Prerequisite: PED 1310 or consent of instructor.)
- PED 1410—Beginning Bowling1 Credit**
Presents the proper selection of equipment, correct method of approach and release of the bowling ball, and scoring. A fee of not more than \$15.00 per quarter may be charged for this activity.
- PED 1420—Intermediate Bowling1 Credit**
Continuation of skills acquired in Beginning Bowling. More emphasis is placed on individual techniques and self-improvement. (Prerequisite: Bowling 1410 or consent of instructor.) A fee of not more than \$15.00 per quarter may be charged for this activity.
- PED 1510—Folk Dance1 Credit**
Instruction in dances from various countries, including square dances.
- PED 1610—Beginning Golf1 Credit**
To acquaint the beginning player with correct swing, selection, and use of the various clubs and basic fundamentals.
- PED 1620—Intermediate Golf1 Credit**
A continuation of PED 1610. Review basic fundamentals; develop advanced skills and strategies. (Prerequisite: PED 1610 or consent of instructor.)
- PED 1710—Soccer1 Credit**
Instruction and practice in the fundamental skills of soccer.
- PED 1800—Social Dance1 Credit**
Instruction, practice, and teaching in basic social dance steps.
- PED 1810—Modern Dance1 Credit**
Basic movement and dance techniques; emphasis on communicative skills, creativity, and improvisation.
- PED 1910—Beginning Weight Training1 Credit**
An introduction to the proper techniques and practices of weight training.

- PED 1920—Intermediate Weight Training**1 Credit
A continuation of PED 1910. Students will also develop and implement a personalized weight training program for their individual use. (Prerequisite: PED 1910 or consent of instructor.)
- PED 2210—Softball**1 Credit
Instruction and practice in the fundamentals of catching, batting, and backing up other positions. Rules and strategies will also be studied.
- PED 2310—Swimming**1 Credit
Training for beginners in swimming, emphasizing recreational swimming. A special fee as designated in class schedule will be charged for this course.
- PED 2410—Beginning Tennis**1 Credit
A brief study of the history of tennis with emphasis on the rules and basic strokes which could lead to accomplished tennis skills.
- PED 2420—Intermediate Tennis**1 Credit
Review of the basic fundamentals and rules, with emphasis on skill, strategy and competition. (Prerequisite: PED 2410 or consent of instructor.)
- PED 2510—Stunts and Tumbling**1 Credit
Practice of stunts, with a minimum achievement of intermediate skill expected.
- PED 2610—Volleyball**1 Credit
Fundamentals, rules, and strategy of play.
- PED 2710—Introduction to Physical Education**3 Credits
A study of the historical background, general scope, principles, and objectives of physical education in its relationship to education as a whole.
- PED 2720—Teaching Individual and Dual Sports**3 Credits
A comprehensive study of individual and dual sports with emphasis on teaching organization, techniques, and methods. To include a practicum.
- PED 2730—Sports Officiating**2 Credits
Detailed techniques and methods of sports officiating involving rule interpretation and ethical character pertaining to interscholastic, intercollegiate, and intramural activities. (Sports include football, basketball, softball, baseball.)
3 hours lecture—laboratory
- PED 2810—Teaching Physical Education in the Elementary Schools** .3 Credits
Study of theories and activities for physical education in the lower grades. Problems in supervision, program planning, instructional methods in both individual and group activities are emphasized.
- PED 2850—Playground Leadership**3 Credits
Learning activities suitable for playgrounds and studying and applying the principles of organizing and directing a playground program.

PHYSICS

To receive credit for a physics course, the lecture section must be accompanied by a laboratory session during the same quarter.

NOTE: The physics sequences PHY 2010-20-30 and PHY 2110-20-30 are normally offered only once a year, beginning in the fall quarter. Students planning to enroll in Physics must therefore begin the sequence in the fall.

PHY 2010—General Physics I **4 Credits**
 Fundamental laws of mechanics. (Prerequisite: MAT 1320 or 1110 and 1210 or consent of instructor.)
 3 hours lecture—3 hours laboratory

PHY 2020—General Physics II **4 Credits**
 Fundamental laws of heat, light, and sound. (Prerequisite: PHY 2010)
 3 hours lecture—3 hours laboratory

PHY 2030—General Physics III **4 Credits**
 Fundamental laws of electricity and magnetism in elements of modern physics. (Prerequisite: PHY 2020)

PHY 2110—Physics I **4 Credits**

PHY 2120—Physics II **4 Credits**

PHY 2130—Physics III **4 Credits**
 PHY 2110 covers mechanics. PHY 2120 covers wave motion, electricity, and magnetism. PHY 2130 covers heat, optics, and modern physics. A sequence course. (Prerequisite: Calculus and Analytic Geometry I) (Corequisite: Calculus sequence)
 3 hours lecture—3 hours laboratory

POLICE SCIENCE AND CRIMINOLOGY EDUCATION

PST 1010—Introduction to Law Enforcement **3 Credits**
 Philosophical and historical background; agencies and respective jurisdictions; police ethics, public relations, and career orientation.

PST 1110—Police Science I **3 Credits**
 A study of legal concepts and procedures, including the laws of arrest and search warrant procedure, beginning with the issuance of legal process to ultimate court disposition, embracing informations, indictments, arraignments, preliminary hearings, bail, grand and petit juries, and the trial.

PST 1120—Police Science II **3 Credits**
 A study of the qualities of an investigation; general criminal investigative methods, procedures and techniques; phases of investigation; testifying and preparation of evidence for court.

PST 2010—Police Administration and Organization **3 Credits**
 A study of police organizations, their hierarchical structure, techniques of administration and management utilized in standard police organizations with emphasis on problems of supervision, responsibility, and control of police units.

PST 2130—Police Science III **3 Credits**
 A continuation of Police Science II with emphasis on the elements, modus operandi, and various investigative aspects of the serious and more frequently occurring crimes, and methods of crime prevention through contact with the public.

- PST 2140—Police Science IV**3 Credits
 An introduction to the theory and practice of basic scientific techniques utilized in the investigation and solving of crime. These procedures which will be presented by means of classroom lectures, demonstration sessions and practical laboratory periods, will emphasize the proper handling and examination of evidence, fingerprinting, photography, glass fractures, casts and molds, narcotics and narcotic preparations, and crime scene searches.
- PST 2200—Seminar in Police Problems**6 Credits
 A course designed to consolidate the various learning experiences in police science. Emphasis is placed on special problems.
- PST 2310—Introduction to Corrections**3 Credits
 This course includes the history of criminal corrections in the United States; analysis of the crime problem; identification of the correctional client; correctional methods used in the United States; and emphasizes correctional goals in the criminal justice system.

POLITICAL SCIENCE

- POL 1010—Fundamentals of American Government**3 Credits
 An introduction to the setting and foundations of American politics with emphasis on citizen attitudes and values, national and state constitutions, political parties, interest groups, public opinion, and voting.
- POL 1020—United States National Government**3 Credits
 United States national government with special emphasis upon the executive, legislative, judicial and administrative functions.
- POL 1030—State and Local Government in the United States**3 Credits
 Forms of state and local government organizations. Interrelationships between state and local, state and federal, and local and federal governments.
- POL 2010—Introduction to Political Science**3 Credits
 A comprehensive introduction to the study of political science with emphasis on the theory, processes, and institution of politics and governments in the modern world.

PSYCHOLOGY

- PSY 1000—Effective Study (A Study Problems Group)**1 Credit
 A course designed to help students develop effective study skills and to eliminate barriers to a successful college experience.
- PSY 1010—General Psychology I**3 Credits
 Introduction to the methods and findings of contemporary psychology. The following topics are covered: the history of psychology, the scientific method of observation; the principles of efficient learning; remembering and forgetting; language, thinking, and problem-solving; the senses; and perception.
- PSY 1020—General Psychology II**3 Credits
 Basic principles of adjustment, personality development, and psychological measurement and evaluation are covered.

- PSY 1030—General Psychology III3 Credits**
Developmental and social psychology, motivation and emotion, and physiological psychology are the topics covered.
- PSY 1110—Career Planning3 Credits**
A course designed to encourage the student to understand himself/herself through past achievements, test scores, and career goals. The student is introduced to the world of work. Local, regional and national job opportunities in terms of entrance requirements, salaries, duties and conditions of work are reviewed.
- PSY 2210—Educational Psychology3 Credits**
The principles of growth and development are studied and related to student learning. Capacity for learning, methods of effective study, and the effect of the environment on the student are investigated and studied.
- PSY 2310—Abnormal Psychology3 Credits**
Topics covered include definitions and indices of abnormal behavior, general symptoms of specific neurotic and psychotic syndromes.
- PSY 2410—Child Psychology3 Credits**
Psychological and physiological growth and development of the human organism, beginning with conception and continuing to adolescence.
- PSY 2420—Adolescent Psychology3 Credits**
Psychological and physiological growth and development of the human organism from the age of twelve years through the middle or late twenties.
- PSY 2430—Psychology and Everyday Life3 Credits**
This elective course requires no background in psychology. It treats practical useful areas of psychology not treated in-depth in other courses. Two topics which might be covered—among others—are how psychology promotes happy homes and how psychology can be effectively applied.
- PSY 2450—Human Development Seminar3 Credits**
This course is designed to utilize the experience of the student to achieve self-understanding, to study the effect of their relationships with others and to assist other members of the class to do the same. Values, interests, and attitudes will be explored in the small group setting.
- PSY 2510—Social Psychology3 Credits**
A course to teach the relation of psychology, to the social environment. Topics studied include prejudice, attitude change, interpersonal attraction, aggression.
- PSY 2610—Psychological Aspects of Management3 Credits**
A study of the application of psychological principles to business and other areas involving management. Topics to be covered will include supervision, communications, human relation skills, scientific and humanistic management, and group dynamics.

READING

- REA 1010—Foundation for College Reading I3 Credits**
This course is designed to assist the student in developing reading skills that are necessary for college success. The materials surveyed will be in the humanities, the social sciences, science, and mathematics. Study skills are

presented in accordance with each student's needs, as determined through pretesting and individual conferences.

3 hours per week—lecture and laboratory

REA 1020—Foundation for College Reading II3 Credits
Continuation of Reading 1010.

3 hours per week—lecture and laboratory

REA 1030—College Reading3 Credits

This course is designed to aid the student who has done average work in college courses to extend comprehension, vocabulary, study methods, and rate-building skills. Each student's reading efficiency is diagnosed and a program is designed to fit individual needs. The reading requirements are correlated with needs experienced by the student in other classes.

3 hours per week—lecture and laboratory

REA 1040—Speed Reading3 Credits

This course is designed to improve the reading efficiency of the above average student. Though initial attention is given to reading speed, extension of vocabulary, comprehension and study skills are encouraged.

3 hours per week.

RECREATION

REC 1010—Introduction to Recreation3 Credits

Introduces the basic fundamentals of the nature, scope, and significance of organized recreation services. It includes study of factors involved in the operation of basic recreation units, major program areas, organizational patterns, and the interrelationship of special agencies and institutions which serve the recreation needs of society.

REC 1020—Social Recreation3 Credits

Introduces methods and materials for planning, organizing, and conducting social activities for groups of various sizes and ages in a variety of social situations. Emphasis is on the mechanics of planning and presenting a repertoire of activities for social recreation events. Major activities will be discussed, played, and/or demonstrated.

REC 1030—Outdoor Education3 Credits

Includes study of the history, development, and trends of outdoor recreation, conservation, and organized camping. Emphasis is on laboratory work, field trips, and the development of outdoor skills.

REC 1110—Team Sports3 Credits

Offers a survey of the basic terminology, skills, and rules of selected team sports and their use in recreation. Emphasis is upon knowledge and understanding of the organization, administration, and promotion of sports rather than mastery of performance skills.

REC 1310—Arts and Crafts3 Credits

Demonstrates the methods and materials used in arts and crafts projects for a variety of recreational settings: school, camp, playground, recreation center, and club. Emphasis is on constructing, administering, promoting, and teaching crafts.

REC 2010—Organization and Administration in Recreation3 Credits

A study of essential elements and basic principles involved in the organizations, supervision, promotion, and evaluation of various types of recreation programs. Emphasis is on organized programs and services.

REC 2310—Water Sports3 Credits

Includes the basic terminology, skills, and techniques of selected water-related activities and their use in recreation programs.

REC 2410—Field Work3 Credits

A course designed to give the recreation student practical experience under supervision. The first experience should have the student working with an agency leader as a junior leader. Exposure to leadership responsibilities of planning, conducting, and evaluating an activity or program should result.

REC 2510—Introduction to Marine Management3 Credits

Introduces the basic fundamentals of the nature, scope, and modern practices in business oriented marine operations. Includes visits to local marinas and related marine-based industries.

REC 2520—Small Craft Operations3 Credits

A study of basic principles and practices involved in small to medium-range boating. Includes an in-depth study into the kinds of equipment in use, mechanical fundamentals, management, and safety.

REC 2610—Camp Crafts3 Credits

This course is designed to provide prospective leaders in camping and outdoor education with necessary camping skills. Each student will develop skills in firecraft, food selection and preparation, toolcraft, ropecraft, gear and shelter, map and compass, health and safety, nature and conservation, and leadership techniques. Emphasis is both on learning the skills and learning to teach them to others. Each student will participate in planning, executing and evaluating an overnight trip in which the acquired skills will be utilized. At the conclusion of the course, all students who have fulfilled the requirements will be awarded the Advanced Campcrafter Certificate by the American Camping Association.

REC 2710—Park Administration3 Credits

Includes the history, development, and trends in park administration. Introduces methods and materials for planning, organizing, and conducting park supervision and services. Includes field trips to local parks.

REC 2720—Facilities Planning and Maintenance3 Credits

An in-depth study of essential elements and principles involved in physical plant planning and management. Includes special student projects.

REC 2810—Camping and Camp Leadership3 Credits

Emphasis is placed upon the camp counselor, the planning of programs, and demonstrations applicable to camp life.

REC 2870—Recreation Leadership3 Credits

Principles, materials, methods, and practice in planning and directing recreation.

SECRETARIAL SCIENCE

- SSC 1010—Typing I**3 Credits
 Development of techniques in touch typewriting and the introduction of skills involved in composing at the typewriter, typing letters, typing simple tabulations, and typing manuscripts.
 5 hours per week—lecture and laboratory
- SSC 1020—Typing II**3 Credits
 Continued development of typewriting techniques with emphasis on increasing speed and accuracy in typing business reports, correspondence, tabulations, and manuscripts. (Prerequisite: SSC 1010 or equivalent)
 5 hours per week—lecture and laboratory
- SSC 1030—Typing III**3 Credits
 Continued emphasis on speed and accuracy building with more emphasis on timed production on various types of business materials. Training on various typewriters including the Executive, Selectric II, and Decimal Tab typewriters. (Prerequisite: SSC 1020 or equivalent)
 5 hours per week—lecture and laboratory
- SSC 1110—Shorthand I**5 Credits
 Theory of Gregg Shorthand, Diamond Jubilee Series; development of dictation and transcription abilities.
 5 hours per week—lecture and laboratory
- SSC 1120—Shorthand II**5 Credits
 Further application of principles of Gregg Shorthand, DJS, to the development of ability to read, write, and transcribe shorthand outlines. Transcription on the typewriter is introduced with emphasis on transcribing skills. Mailable transcripts are introduced. (Prerequisite: SSC 1110 or equivalent)
 5 hours per week—lecture and laboratory
- SSC 1130—Shorthand III**5 Credits
 Continued development of dictation and transcribing skills and increased emphasis on speed building and mailable transcripts. (Prerequisite: SSC 1120 or equivalent)
 5 hours per week—lecture and laboratory
- SSC 1210—Machine Transcription**3 Credits
 Development of skill in transcribing dictation on dictation/transcription equipment with emphasis on grammar, punctuation, spelling, letter style and form, etc. Emphasis is placed on mailable copy. (Prerequisite: SSC 1010)
- SSC 2010—Typing IV**3 Credits
 Continuation of speed and accuracy building with emphasis on mailability. (Prerequisite: SSC 1030 or equivalent)
 5 hours per week—lecture and laboratory
- SSC 2110—Shorthand IV**5 Credits
 Improvement of ability to take dictation and transcribe mailable copy with emphasis on the development of job competency. (Prerequisite: SSC 1130 or equivalent)
 5 hours per week—lecture and laboratory

- SSC 2210—Office Practice3 credits**
 A study of the principles and techniques of office procedures, including a knowledge of office materials, job interview techniques, job application processes, telephone procedures, and office duties. (Prerequisite: SSC 1010 or equivalent)
- SSC 2310—Legal Secretary I.....3 Credits**
 Basic fundamentals of law, legal terminology and preparation of basic legal documents by the secretary. Designed for student or secretary with no law office background. Approved for NALS certification.
- SSC 2320—Legal Secretary II3 Credits**
 Continuing instruction on legal fundamentals; document preparation; law office management and research. Approved for NALS certification. (Prerequisite: SSC 2310 or equivalent experience to be approved by instructor.)
- SSC 2330—Legal Transcription3 Credits**
 Development of skill in typing legal documents and transcribing legal dictation and introduction of procedures a legal secretary should follow on the job.
- SSC 2810—Report Writing/Records Management3 Credits**
 Basic principles of writing business reports and research papers will be presented. Instruction in the use of the library for research is given. Three weeks of the course will be spent in discussion of filing systems, indexing, and alphabetic and geographic filing techniques.

SOCIAL SCIENCE

- SS 1110-1190—Social Science Seminar3 Credits**
 In-depth analysis of a particular topic, concern, or problem in the social sciences. Social science elective credit only.

SOCIOLOGY

- SOC 2010—Introduction to Sociology3 Credits**
 A general survey of human social relationships.
- SOC 2020—Social Institutions3 Credits**
 A sociological analysis of American society. Emphasis is placed on social power, mass society, as well as the nature and structure of major social institutions.
- SOC 2030—Social Problems3 Credits**
 A study of a number of problems in American society including their origins, extent, nature, causal factors, and suggested solutions. Problem examples include such topics as urbanization, family disorganization, crime and criminal justice, population and environmental challenges.
- SOC 2110—Introduction to Cultural Anthropology3 Credits**
 An introduction to the principles, concepts, methods, and scope of anthropology. Emphasis is placed on the nature of culture and society, cultural adaptation, and differences and similarities among the cultural components of social organization, economic organization, political organization, language, ideology, technology, and art.

- SOC 2120—Introduction to Prehistory and Archaeology3 Credits**
 An introductory survey of human origins and prehistoric cultures. Emphasis is placed on the general principles, theoretical orientations, and methods of archaeology.
- SOC 2130—Introduction to Criminology3 Credits**
 An analysis of the nature and extent of crime. Emphasis is placed on criminal and delinquent behavior and theories of causation; the criminal personality and career orientation; and principles and theories of prevention, control, and treatment.
- SOC 2140—Marriage and the Family3 Credits**
 An analytical and practical examination of the family as a unit of interacting individuals with emphasis on socialization, family pathology, social change, and the future of the family.

SPANISH

- SPA 1010—Beginning Spanish I3 Credits**
 (No prerequisite)
- SPA 1020—Beginning Spanish II3 Credits**
 (Prerequisite: SPA 1010)
- SPA 1030—Beginning Spanish III3 Credits**
 Elementary grammar, pronunciation and conversation through use of films, videotapes, cassette tapes, filmstrips and computer programs. (Laboratory required.) (Prerequisite: SPA 1020)
- SPA 2010—Intermediate Spanish I3 Credits**
 (Prerequisite: SPA 1030)
- SPA 2020—Intermediate Spanish II3 Credits**
 (Prerequisite: SPA 2010)
- SPA 2030—Intermediate Spanish III3 Credits**
 Advanced grammar and conversation through use of films, videotapes, cassette tapes, filmstrips, computer programs and library readings. (Laboratory required.) (Prerequisite: SPA 2020)

SPEECH

- SPE 1020—Voice and Articulation3 Credits**
 A study of the principles of voice and speech production. Attention is given to the individual student's ability and development of vocal skills. (No prerequisite)
- SPE 2410—Basic Speech Communication3 Credits**
 Designed to introduce the student to the basic principles and techniques of public speaking. Emphasis in class is placed upon the selection of subjects and supporting materials, the organization of the speech, and the oral and physical aspects of delivery.

- SPE 2430—Interpersonal Communication3 Credits**
 Communication theory in its application to informal, face-to-face situations. Practical application of the impromptu speech relative to interpersonal communication. (Prerequisite: SPE 2410)
- SPE 2440—Business and Professional Speaking3 Credits**
 Designed for students going into management, human relations, communications, personnel management and the sciences where the individual must work on a person-to-person basis. Included in the course are units on presenting informative reports, using visuals, interview and conference techniques, and manuscript speaking. (No prerequisite)
- SPE 2450—Debate3 Credits**
 A study of the principles of argumentation and debate, including analysis, briefing, evidence, reasoning, and refutation; class debating on vital questions. (Prerequisite: SPE 2410)
- SPE 2710—Oral Interpretation3 Credits**
 This course is to introduce students to the analysis of literature for the purpose of presenting it orally to an audience. It will include a study of those basic speech skills necessary for such presentation.
- SPE 2720—Fundamentals of Acting3 Credits**
 Fundamentals of Acting will emphasize the mechanics (vocal and physical) of presenting a character on stage.
- SPE 2730—Introduction to Theatre3 Credits**
 A survey course in theatre covering the history and development of Western drama. This course will emphasize drama as production rather than as literature.
- SPE 2740—Fundamentals of Theatrical Production3 Credits**
 This course is designed to introduce students to the practical considerations of play production. It emphasizes theory and practice in the various areas of design and stage construction, introduces the students to meaningful rehearsal techniques and offers them the opportunity to apply acquired classroom skills to actual stage experience.

TECHNOLOGY

- TEC 1010—Man and Technology I2-3 Credits**
 An introductory course which analyzes the problems that have developed in American society because of technological change. The scientific method as it applies to the world of work is considered. Primarily for special technology programs.
- TEC 1020—Man and Technology II2-3 Credits**
 A continuation of TEC 1010. Emphasis is placed on getting a job, job interview skills, job applications, good work habits, etc. Primarily for special technology programs.

Councils and Committees

EXECUTIVE COUNCIL

President
 Dean of Instruction
 Dean of Student Personnel Services
 Dean of Administrative Services
 Business Manager
 Director of Personnel and Affirmative Action

COLLEGE COMMITTEES

Academic/Curriculum Council
 Admissions and Retentions Committee
 Athletic Committee
 Awards and Graduation Committee
 Cafeteria Committee
 Discipline Committee
 Executive Council
 Faculty Council
 Financial Aid Committee
 Library Committee
 Publications Committee
 Professional Growth Committee
 Social Concerts, Lectures Committee

THE PRESIDENT'S ROUND TABLES

The President of Roane State Community College periodically schedules an "open hour" for student organization officers and any other interested members of the student body. The student round table is scheduled weekly in the student center.

An "open hour" for faculty to discuss matters of concern is scheduled weekly, also. The President's Round Table for Faculty is scheduled in the faculty office areas.

Definition of Terms

Admission—Acceptance of a candidate for enrollment.

Admission to Advanced Standing—Granted on the basis of credits earned in another college or on the basis of demonstrated educational attainment beyond the minimum required for admission.

Adviser, Advisee—The adviser, or counselor, is the instructor assigned to help the student with his academic problems. The student is called the advisee.

Average, Grade Point—A measure of average scholastic success obtained by dividing the total number of grade points earned by the total number of hours of course work attempted.

Calendar—The division of the full calendar year. The quarter calendar is composed of three regular terms per year with about ten weeks per term of instruction excluding final examinations in a school year of about the same over-all length as under a semester system, running from September through early June, with the fourth quarter as a summer session.

Classification—Student status in respect to progress toward the completion of his/her curriculum based upon the number of hours or courses to his/her credit at the time of registration and scholarship achievement required for advancement to another class.

Course—Organized subject matter in which instruction is offered within a given period of time and for which credit toward graduation or certification is usually given.

Course Number—Identifies class level and distinguishes it from other courses in a given area of study.

Course Corequisite—When two or more classes are required simultaneously.

Course Prerequisite—A preliminary requirement that must be met before a certain course may be taken.

Credit Hours (Quarter Hour)—Defined by the number of hours per week in class and the number of weeks in the quarter. One quarter hour is usually assigned to a class that meets fifty minutes a week during a quarter or laboratory type instruction that meets two to four hours a week for a quarter or a combination of class and laboratory meetings depending upon the type of instruction and material covered. Therefore, a three-hour non-laboratory course would in general meet three hours each week during the quarter; and the credit earned would be **THREE QUARTER HOURS**. A total of 99 quarter hours is the minimum required for graduation.

- Curriculum**—The whole body of courses offered for study.
- Dean's List**—Common designation for the published list of students who have made an honor average for the term.
- Degree (Earned)**—Title bestowed as official recognition for the completion of a curriculum.
- Degree, Associate**—Granted upon completion of an education program of less than four years of college work, generally for the completion of the curriculum.
- Degree Student**—One who has fulfilled the admissions requirements and who is pursuing an Associate Degree program, referred to by some colleges as a regular student.
- Department**—An area which offers instruction in a particular branch of knowledge.
- Developmental Studies**—A program of studies in various areas designed to give the student background prerequisite to college level studies.
- Dismissal (Academic)**—Involuntary separation of a student from his/her college because he/she has not met the academic requirements.
- Dismissal (Disciplinary)**—Involuntary separation of a student from his college as a result of action taken because of misconduct.
- Division**—A group of related departments, such as the Humanities Division.
- Elective**—A subject or course which the student may choose as distinguished from courses which are required.
- Financial Aid, Student**—Assistance to students in the form of "gift" aid (scholarships and grants) and "self-help" aid (loans and part-time employment). It is usually based on financial need and is used for expenses related to attending college (fees, books, transportation, room and board, and miscellaneous).
- Full-Time Student**—One who is carrying at least seventy-five percent of the normal student hour load. Twelve quarter hours is commonly accepted as a minimum load for a full-time student.
- Grant-in-Aid**—A gift of money made without regard to academic excellence to a student who possesses certain talent sought or valued by an institution, such as, "Athletic Grant-in-Aid," "Music Grant-in-Aid," etc., usually, although not always, made without regard to financial need.
- Major**—The student's primary field of interest. The field of concentration may fall within a single department of instruction or may overlap several departments. In the latter case, the major is described as a division major.
- Minor**—The student's field of secondary emphasis.
- Part-Time Student**—One who is carrying an academic schedule of less than 12 hours.

Probation—Probation status may be for academic or for disciplinary reasons. Academic probation is the result of unsatisfactory scholarship. It is not a penalty but a warning and an opportunity to improve. Academic probation usually involves a compulsory reduction of academic load and interviews for diagnosis of difficulties and for checking on recovery. Sometimes it brings a required restriction of extracurricular activities and general surveillance. Usually the student is required to make regular specified improvement in his/her record in order to avoid disqualification. Disciplinary probation is a middle status between good standing or dismissal. The student remains enrolled but under stated conditions according to the college policies. Disciplinary probation covers a stated trial period during which it is determined whether the student is returned to good standing, having met the stated requirements, or dismissed or suspended at the end of the period for failing to meet the stated requirements.

Quarter—A fourth of a school year. Three quarters constitute the academic year.

Reinstatement—The act of readmitting a student after he has been dismissed.

Section Number—Refers to the specific class of the course for which the student is enrolled.

Special Student—One who is not pursuing an Associate Degree program. Special students either do not fulfill minimum requirements for entrance as degree students or have been permitted to audit a limited or special selection of degree credit courses without regard to degree requirements.

Suspension—Involuntary separation of the student from the College is implied by the term suspension. It may not be a permanent separation but neither is a definite time set when return is expected.

Transfer Student—A student who has withdrawn from one college and is admitted to another.

Transient Student—A student in good standing in any recognized college who is taking work in another college to transfer back to his college.

Withdrawal—A release from enrollment. A student notifies the appropriate authorities, thereby making it an Official Withdrawal. When the student merely stops attending classes without notifying the authorities, failing marks are recorded and charged against him. This is termed Unofficial Withdrawal.

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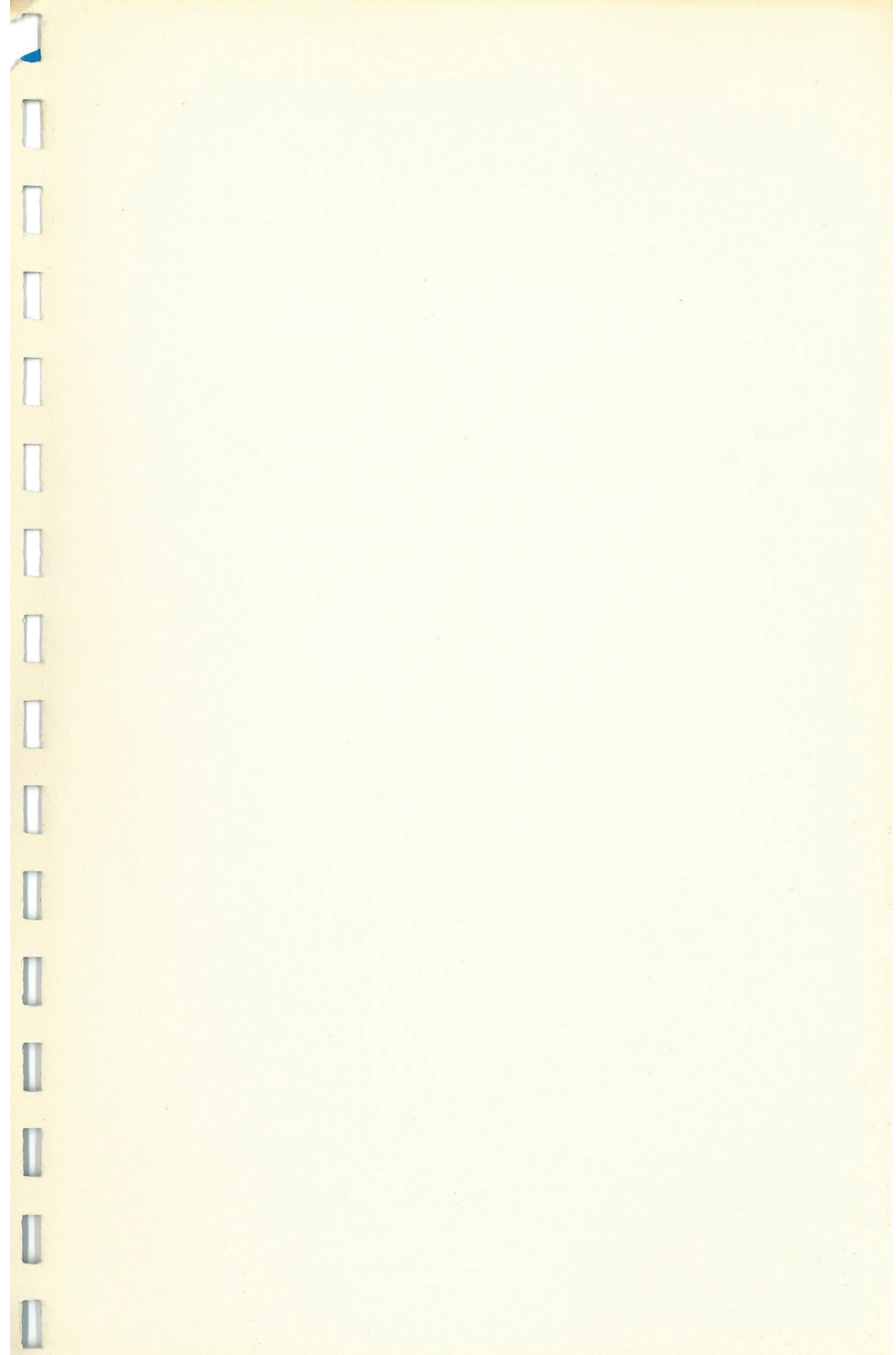
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