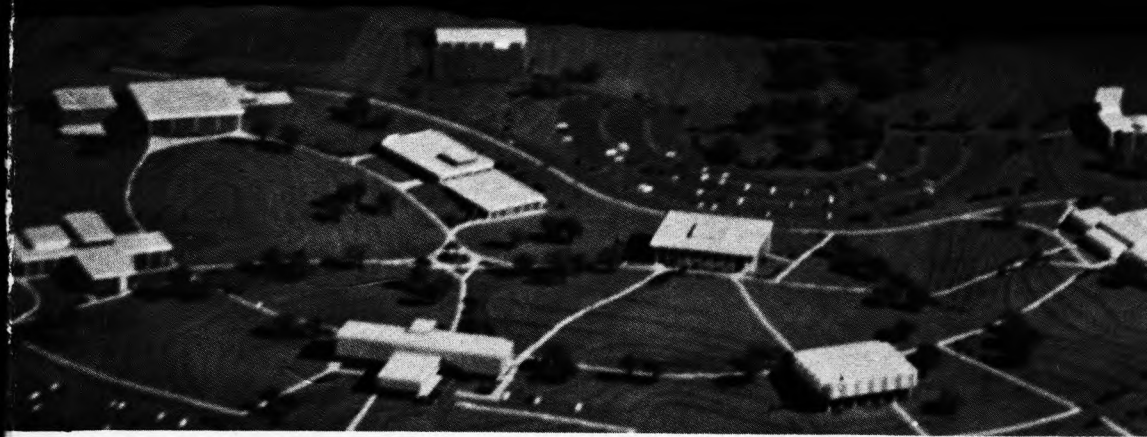


MISSOURI WESTERN COLLEGE



1969
general catalog

TENTH & EDMOND • ST. JOSEPH, MO. 64501 • ADAMS 3-3134

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MISSOURI WESTERN STATE COLLEGE

FOUR-YEAR CATALOG

WILL BE AVAILABLE

SEPTEMBER 1, 1968

Missouri Western College

Tenth and Edmond Streets

St. Joseph, Missouri

64501

Telephone: 233-3134

1968 - 1969

Missouri Western College is accredited by the North Central Association of Colleges and Secondary Schools and the Missouri State Department of Education.

Cover: The cover shows an artist's conception of the new campus which is now under construction.

 **PROMPT PRINTING CO.**

Directory for Correspondence

- COLLEGE ADMINISTRATION** The President
Dr. M. O. Looney
- INSTRUCTION, CURRICULUM AND
SCHOLASTIC AFFAIRS** Dean of Academic Affairs
Dr. N. B. Morrison
- STUDENT AFFAIRS, CONVOCATIONS, AND
STUDENT UNION** Dean of Student Affairs
Mr. Lowell Clark
- ADMISSION, REGISTRATION, SCHEDULING
AND TRANSCRIPTS** Registrar and Director of Admissions
Mr. J. W. Dallam
- BUSINESS MATTERS, PAYMENT OF FEES,
BUILDINGS AND GROUNDS** Business Manager
Mr. Kenneth Hawk
- PUBLICATIONS, PUBLIC RELATIONS AND
NEWS RELEASES** Director of Publications and
Public Relations
Mr. Frank Smith
- FINANCIAL AIDS** Director of Financial Aids
Mr. George Ashworth
- FIELD SERVICES, ALUMNI, AND
PLACEMENT** Director of Field and Special Services
Mr. Sam Sharp
- DATA PROCESSING** Director of Data Processing
Mr. William Wood
- COLLEGE ENTRANCE, TESTING PROGRAM,
GUIDANCE AND COUNSELING** Counselors
Mrs. Dorothy Graham
Mr. Thomas Dewey

COLLEGE CALENDAR

SUMMER SESSION

1968

- June 3 thru 6 Registration
June 10 and 11 (7:00-9:00) Evening School Registration
(Register 1st night of class)
June 10 Day and Evening Classes Begin
July 4 Holiday
August 2 Session Ends

FALL SEMESTER

1968 - 1969

- June 17 thru September 13 Continuous Registration
September 9 and 10 (6:00-9:00) Evening School Registration
September 16 Day and Evening Classes Begin
November 28 Thanksgiving Vacation Begins
December 2 Classes Resume
December 14 Christmas Vacation Begins
January 2 Classes Resume
January 20 thru 24 Final Examinations

SPRING SEMESTER

1969

- January 20 thru 31 Registration (New and Transfer Students)
January 27 and 28 (6:00-9:00) Evening School Registration
February 3 Day and Evening Classes Begin
April 5 Spring Vacation Begins
April 14 Classes Resume
May 26 thru 29 Final Examinations
May 29 Commencement

PREFACE

The catalog of Missouri Western College provides the administration and faculty of the College with an authoritative guide for administering the instructional program. It provides the student with an official handbook on regulations and procedures. It offers information to prospective students.

The catalog is planned for convenience and contains nine parts which are as follows:

PART I—Information about Missouri Western College.

PART II—The Board of Regents, the Board of Trustees, Administration, Faculty, Office and Maintenance Personnel.

PART III—General Information for the Students.

PART IV—Academic Policies and Regulations.

PART V—Student Services.

PART VI—Student Activities.

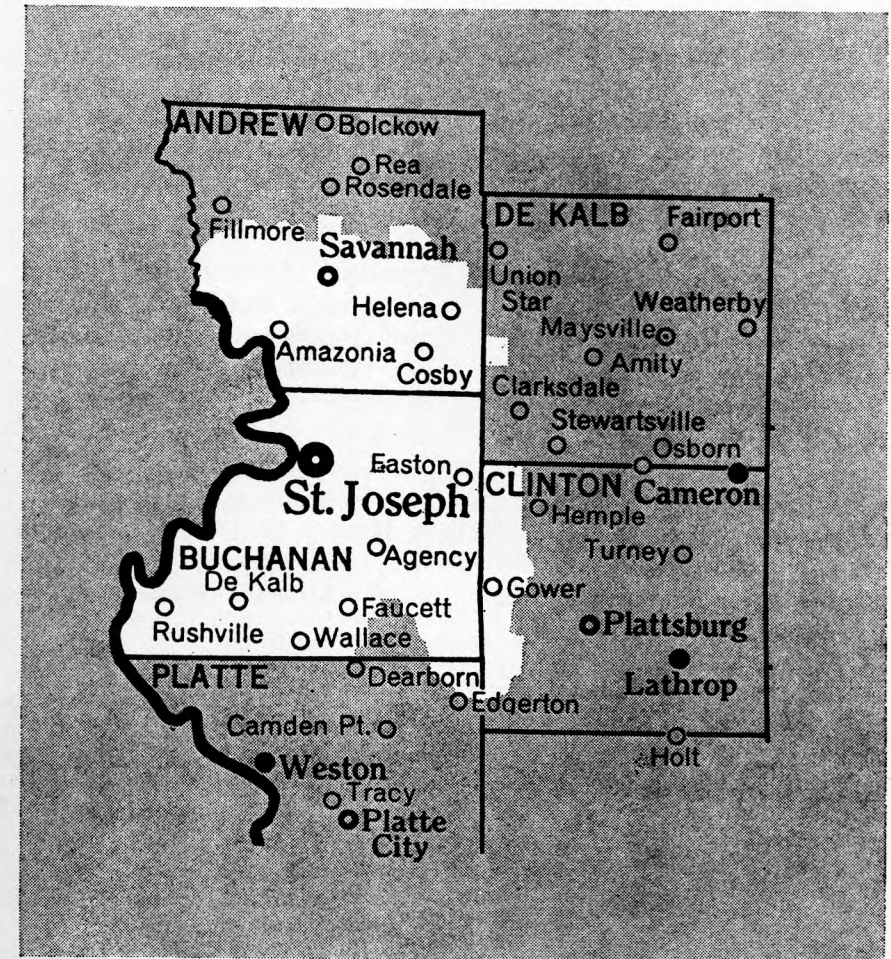
PART VII—Scholarships and Student Aid.

PART VIII—Programs of Study.

PART IX—Course Descriptions.

PART I — Information About Missouri Western College

MISSOURI WESTERN COLLEGE DISTRICT MAP



THE MISSOURI WESTERN JUNIOR COLLEGE DISTRICT was formed to include 11 school districts in a five county area. School districts included in the 1965 election were Savannah, Avenue City, Gower, Platte Valley, Easton, Moore, Spring Garden, Agency-Faucett, DeKalb-Rushville, Lake Contrary, and St. Joseph. Since the election, some of these districts have merged.

HISTORICAL SKETCH

The St. Joseph Junior College was organized by an act of the Board of Education in the summer of 1915. It was an integral part of the city public school system. The administration was under the direction of the Board of Education and the Superintendent of Schools.

Classes were originally conducted in what was known as the Central High School Building at Thirteenth and Olive and were under the immediate direction of the principal and staff of Central High School. In 1925 most of the classes were moved to the adjoining building, which at the present houses the Everett School. In January 1933, a separate administration was established and all classes were moved to the present building at Tenth and Edmond.

In 1964, a citizens' committee was organized. After months of hard work, this committee, aided by interested citizens, was able to gain the support needed, and petitions were signed in eleven school districts for the formation of a Junior College District. The eleven districts involved were Savannah, Avenue City, Gower, Platte Valley, Easton, Moore, Spring Garden, Agency-Faucett, DeKalb-Rushville, Lake Contrary, and St. Joseph. These petitions were presented to the State Board of Education on December 17, 1964. The State Board accepted the petitions and decreed that an election be held on January 19, 1965, to determine whether such a district should be formed. The majority of the voters were in favor of the proposition, and the Missouri Western Junior College District was organized.

In 1965, the Missouri State Legislature enacted a measure which will make it possible to add the junior year in the fall of 1969 and the senior year in the fall of 1970. When this occurs, the institution will be known as Missouri Western State College.

THE PRESIDENT'S MESSAGE

As we continue in a transitional period at Missouri Western College, moving from a two-year institution to a four-year college, detailed planning becomes increasingly important. This change is providing a great challenge to the staff and students of Missouri Western and to the entire area. The development of Missouri Western will have an effect on the lives of virtually every person in the area, either directly or indirectly.

The word **more** most adequately describes education and people today. There are **more** people. There are **more** jobs requiring higher education, and therefore **more** need for a college education than ever before.



After carefully appraising the needs of the Missouri Western district, the state of Missouri, and the nation, the Missouri Western Boards have committed the college to a program that is frequently referred to as "comprehensive."

Missouri Western will operate under an extensive educational umbrella, providing one-, two-, and four-year college programs in both academic and occupational areas.

Missouri Western will continue an "open door" policy which necessitates a highly developed guidance and counseling program and comprehensive one- and two-year occupational programming.

With continued efforts on the part of the student body, the staff, the administration, the Boards, and the area residents, Missouri Western will not only become the educational and cultural center of the greater St. Joseph area but will also become an integral part of the state and national four-year college structure.

M. O. LOONEY, President.

PHILOSOPHY AND GOALS

For the past fifty years, the St. Joseph Junior College, and now Missouri Western College, has served the youth and adults of the greater St. Joseph area. The primary purpose of the College has been to offer quality two-year "transfer" programs for students desiring to transfer to a four-year institution. However, during the past few years a number of "well-known," modern-day phenomena have caused Missouri Western to reevaluate its basic purposes.

After carefully appraising the needs of the Missouri Western District, the state of Missouri, and the nation, the Boards of Missouri Western have committed the College to a program that is frequently referred to as "comprehensive."

The goals of Missouri Western College are:

1. To develop senior college curricula.
2. To continue an "open door" policy which necessitates a highly developed guidance and counseling program and comprehensive one- and two-year occupational programming.
3. To continue to offer a variety of quality transfer programs.
4. To serve as a cultural center of its district.
5. To develop, on the basis of educational goals and projected enrollments, adequate facilities for all programs.

MEMBERSHIPS

- American Association of Junior Colleges
- American Association of Collegiate Registrars and Admissions Officers
- National Junior College Athletic Association
- North Central Association of Colleges and Secondary Schools
- Council of North Central Junior Colleges
- Association for Higher Education of the National Education Association
- Missouri Association of Junior Colleges
- National Commission on Accreditation
- Association of Colleges and Universities
- American Chemical Society
- Missouri Association of Junior College Student Government
- Central Association of College and University Business Officers

**PART II — The Board of Regents, Board of Trustees,
Administration, Faculty, Office and Maintenance
Personnel**

BOARD OF REGENTS

President — Mr. William F. Enright
 Vice-President — Dr. Thompson E. Potter
 Secretary-Treasurer — Mr. T. V. Teare
 Members — Mayor Douglas A. Merrifield
 Mr. Loren Schneider

BOARD OF TRUSTEES

President — Dr. Thompson E. Potter
 Vice-President — Mr. T. V. Teare
 Secretary — Mrs. Nancy Richardson
 Treasurer — Mr. Kenneth Hawk
 Members — Mr. Robert E. Douglas
 Mr. William F. Enright
 Mr. John Newhart
 Mr. Loren Schneider

ADMINISTRATION

LOONEY, Marvin O. President
 B. S. — Southwest Missouri State College
 M. Ed. — University of Arkansas
 Ed. D. — University of Arkansas

MORRISON, Nolen B. Dean of Academic Affairs
 B. S. — Southwest Missouri State College
 M. Ed. — University of Arkansas
 Ed. D. — University of Arkansas

CLARK, Lowell W. Dean of Student Affairs
 B. S. — Kansas State University
 M. S. — Kansas State University
 Graduate Study — University of Colorado

ASHWORTH, George M. Director of Financial Aids
 B. S. — Northwest Missouri State College
 M. Ed. — University of Missouri

HAWK, Kenneth L. Director of Business Affairs
 B. A. — Fort Hays Kansas State College
 M. S. — Fort Hays Kansas State College

DALLAM, Jerald W. Director of Admissions
 and Registrar
 B. S. — Northwest Missouri State College
 M. S. — Oklahoma State University

SHARP, Sam H. Director of Field and
 Special Services
 B. S. — University of Alabama
 M. S. — Alabama Polytechnic Institute

SMITH, Frank R. Director of Publications
 and Public Relations
 B. J. — University of Missouri

WOOD, William A. Director of Data Processing
 B. S. — University of Denver

GRAHAM, Dorothy B. Counselor
 B. A. — University of Iowa
 M. A. — San Diego State College
 Graduate Study — University of Colorado

DEWEY, Thomas E. Counselor
 B. S. — Kansas State College at Pittsburg
 M. S. — Kansas State College at Pittsburg

WIGERSMA, Helen C. Librarian
 B. A. — University of Missouri
 M. L. S. — University of Illinois

LITTLE, Ed C. Emeritus
 B. S. — Cotner College
 M. S. — State University of Iowa
 Graduate Study — State University of Colorado

FACULTY AT MISSOURI WESTERN COLLEGE

- AGENSTEIN, Evan R. Math and Physics
 B. S. — Northwest Missouri State College
 M. A. — University of Missouri at Kansas City
 Graduate Study — University of Missouri
- BALLEW, Elizabeth A. Chemistry
 B. S. — University of Missouri
 M. S. — University of Missouri
- BENSYL, Conrad N. Chemistry
 B. S. — Northwest Missouri State College
 M. S. — Kansas State College at Emporia
- BURRI, Charles R. Physical Education
 B. S. — Northwest Missouri State College
 M. Ed. — University of Missouri
 Graduate Study — University of Missouri
- CARNEY, George O. Social Science
 B. A. — Central Missouri State College
 M. A. — Central Missouri State College
 Graduate Study — Colorado State College
- CRUMLEY, Richard E. Biology
 B. S. — Kansas State College at Pittsburg
 M. S. — Kansas State College at Emporia
- DOHERTY, Mary Lee Humanities and Communications
 B. A. — William Jewell College
 M. A. — University of Colorado
- DURHAM, Lu M. Humanities and Communications
 B. A. — University of Iowa
 M. A. — University of Missouri at Kansas City
- ENYEART, James L. Fine Arts
 B. A. — Kansas City Art Institute
- ERTMAN, Irene P. Humanities and Communications
 B. S. — Kansas State College
 M. A. — Kansas State College at Pittsburg
 Graduate Study — Kansas State College
- FINDERS, Robert C. Business and Economics
 B. A. — University of Maryland
 M. B. A. — University of Iowa
- FLANAGAN, Frances Humanities and Communications
 B. A. — Mount St. Scholastica College
 M. A. — State University of Iowa
 Graduate Study — University of Wyoming
 University of Colorado
 Scottish Universities, Edinburgh

- FORCE, Harry F. Biology
 B. S. — Alabama State Teachers College
 M. A. — George Peabody College for Teachers
- GETTYS, Helen C. Psychology and Elementary
and Secondary Education
 B. S. — University of Missouri
 M. S. — University of Missouri
 Graduate Study — University of Chicago
- GILMOUR, F. Matthew Fine Arts
 B. M. — Missouri Valley College
 M. M. — University of Missouri at Kansas City
 Graduate Work — University of Missouri at Kansas City
- GRAINGER, Don L. Business and Economics
 B. S. — Central Missouri State College
 M. S. — Central Missouri State College
- GREENE, Bonnie J. Physical Education
 B. S. — University of Arizona
 M. A. — Arizona State College
- GROH, Sharon L. Fine Arts
 B. S. — Park College
 Graduate Study — University of Missouri at Kansas City
- HARDEN, Vernon W. Humanities and Communications
 B. S. — Tarkio College
 M. A. — Arizona State University
 Graduate Study — University of Arizona
- HARVEY, Marian V. Social Science
 A. B. — Northwestern University
 A. M. — University of Chicago
 Graduate Study — University of Wisconsin
- HECKEL, Achsah M. Chemistry
 B. S. — Kansas State University at Manhattan
- HOFFMAN, Rosemary L. Humanities and Communications
 B. S. — Northwest Missouri State College
 Graduate Study — Emory University
 Middlebury College
 University of Colorado
- HUSTON, Bill L. Physics and Math
 B. A. — Tarkio College
 M. A. T. — Duke University
 Graduate Study — University of Missouri
- JENKINS, Vernon Fine Arts
 B. S. — Northwest Missouri State College
 A. M. — Colorado State College

JORDAN, James R. Social Science
 B. S. in Ed. — Central Missouri State College
 M. A. — University of Missouri at Kansas City
 Graduate Study — Northwestern University

LACY, Louise C. Humanities and Communications
 A. B. — University of Missouri
 A. M. — University of Missouri

LONG, James Physical Education
 B. S. — Southwest Missouri State College
 M. Ed. — University of Missouri

MARION, Glenn E. Engineering and Technology
 B. S. — Northwest Missouri State College
 M. S. — Oregon State College
 Graduate Study — Missouri School of Mines and Metallurgy

MCCANN, Willis H. Psychology and Elementary
 and Secondary Education
 A. B. — University of Missouri
 M. A. — Cornell University
 Ph.D. — Indiana University
 LL.B. — University of Kansas City

MEYER, Myron M. Humanities and Communications
 B. H. L. — Hebrew Union College
 B. A. — University of Cincinnati
 D. D. — Hebrew Union College
 Graduate Study — New York School of Hebrew Union College
 University of Missouri at Kansas City

MILLER, Richard T. Humanities and Communications
 B. S. — Northeast Missouri State Teachers College
 M. A. — Northeast Missouri State Teachers College

MITCHELL, Marian Business and Economics
 B. S. — Northwest Missouri State College
 Graduate Study — Central Missouri State College

OWNBEY, Sandra Jane Business and Economics
 B. S. — Northeast Missouri State College
 M. A. — Northeast Missouri State College

PAWLING, Robert Engineering and Technology
 A. A. — Colorado A. & M.

PETTIJOHN, Harriett Physical Education

PHELAN, Elizabeth J. Social Science
 B. S. — St. Mary's College
 M. S. — Creighton University

PITTER, Herman A. Humanities and Communications
 B. A. — William Penn College
 Graduate Study — Kansas State University

POPPLEWELL, Frank S. Social Science
 B. S. — Kansas State College
 M. S. — Kansas State College
 A. M. — University of Missouri

REDMOND, John Chemistry
 B. S. — University of Missouri
 M. S. — University of Missouri
 Graduate Study — University of Missouri

RIEMER, Roberta S. Fine Arts
 A. B. — Park College
 M. M. — Northwestern University
 Graduate Study — Chicago Musical College
 Columbia University

ROBBINS, Donald J. Biology
 B. S. — Kansas State College at Pittsburg
 M. S. — Kansas State College at Pittsburg
 Graduate Study — University of Oklahoma

SANDSTAD, Neil A. Fine Arts
 B. A. — Carleton College
 M. A. — State University of Iowa

SCHMITZ, JR., Leo H. Physics and Math
 B. S. — University of Missouri
 M. Ed. — University of Missouri
 M. A. — University of Illinois

SHROUT, Ethel H. Business and Economics
 B. S. — Northwest Missouri State College
 M. S. — University of Missouri
 Graduate Study — Oklahoma State University

SIRENO, Peter Business and Economics
 B. S. — Northeast Missouri State College
 B. S. E. — Northeast Missouri State College
 M. A. — Northeast Missouri State College

SMITH, Frank R. Humanities and Communications
 B. J. — University of Missouri

TAYLOR, Richard B. Humanities and Communications
 B. S. — Northeast Missouri State College
 B. J. — University of Missouri
 A. M. — University of Missouri

THEISEN, Lee S. Social Science
 B. A. — State University of Iowa
 M. A. — University of Iowa
 Graduate Study — University of Iowa

TOMLINSON, Veva B. Humanities and Communications
 B. S. in Ed. — Central Missouri State College
 M. A. — Duke University
 Graduate Study — University of Missouri at Kansas City

VARGAS, Eduardo E. Humanities and Communications
 B. A. — Westminster College
 M. A. — University of Missouri

VEHLOW, Paula M. Humanities and Communications
 B. S. — Northwest Missouri State College
 M. A. — University of Missouri at Kansas City

WATKINS, Lillian R. Physics and Math
 Ph.B. — University of Chicago
 A. M. — University of Missouri
 A. M. — University of Michigan
 Graduate Study — Columbia University
 Northwestern University

WEST, Kenneth D. Psychology and Elementary
 and Secondary Education
 A. B. — University of Kansas
 M. A. — University of Missouri at Kansas City

WIESE, W. Roland Biology
 B. S. — University of Arizona
 M. S. — Arizona State University
 Graduate Study — University of Kansas

WILKERSON, Jerry M. Physics and Math
 B. S. — Central Missouri State College
 M. S. — Central Missouri State College
 Graduate Study — University of Missouri at Kansas City

WOOD, William Computer Science
 B. S. — University of Denver

OFFICE AND MAINTENANCE PERSONNEL

OFFICE:

Black, Goldie Secretary to the Business Manager

Brown, Sandra Secretary to the Registrar

Burright, Marilyn Secretary to the Dean of Academic Affairs

Castle, Elizabeth Library Clerk

Dyche, Luise Secretary to the Dean of Student Affairs

Eylar, Alice Secretary to Director of Publications
 and Public Relations

Miller, Charlene Accountant

Power, Linda Switchboard Operator

Richardson, Nancy Secretary to the President

Rogers, Deanie Data Processing Assistant for
 the Admissions Office

Sims, Connie Controller in Data Processing

Skidmore, Hellen Accountant

Taylor, Marjorie Secretary to Director of Financial Affairs

Wallerstedt, Ruth Secretary to Director of Field
 and Special Services

MAINTENANCE:

Atha, Charles Maintenance Manager

Banks, Otis Maintenance

Westcott, Arlin Maintenance

PART III — General Information for the Students

FOR THE PROSPECTIVE STUDENT

The Missouri Western College Board of Regents, Board of Trustees, administration, and faculty believe that every high school graduate should have the opportunity to extend his formal education beyond high school in both academic and/or technical fields. St. Joseph Junior College had an excellent academic reputation; Missouri Western College is not only continuing this tradition but also is expanding its offerings in the area of technical education.

As an "open door" institution, the Missouri Western College student body comprises a cross-section of the population of this area, ranging from those students whose goal is the attainment of a baccalaureate degree to the student who is interested in a one-year course in secretarial training.

Students who have a real desire to obtain a degree, whether it be a one-year certificate, an associate degree, or a baccalaureate degree, will find an excellent opportunity to fulfill their objectives at Missouri Western.

Some factors which will aid in insuring your success at this institution are: 1. Well-trained and interested counselors who will assist you in making both academic and personal decisions. 2. A faculty which is highly competent in subject presentation and yet is, at the same time, interested in each student. 3. Classes which are small enough to allow individual attention. 4. An administration whose purpose is to assist in creating an atmosphere for learning on the campus and to provide the facilities for this learning to take place.

ACCREDITATION

The Missouri Western College is fully accredited by the North Central Association of Colleges and Secondary Schools and the Missouri State Department of Education.

The College meets the conditions of affiliation with the University of Missouri in conformity with the plan of that institution for accrediting junior colleges, and graduates of Missouri Western College are admitted without examination to junior standing in the University of Missouri and other institutions of like ranking upon presentation of certificates showing completion of sixty-two hours of work and one hundred and twenty-four grade points. Graduates from Missouri Western College have transferred to many of the large colleges and universities with advanced standing.

LIBRARY

The library, housed on the second floor of the main building, contains a collection of books, periodicals, newspapers, microfilm, and audio-visual materials and equipment specifically structured to meet curriculum needs. Its holdings number 20,000 volumes, a total which is rapidly growing. The library is open a total of 70.5 hours per week, including Sunday afternoons, and all during school vacations. Two professional librarians are on the staff to help students locate information. Co-operative arrangements have been made with the St. Joseph Public Library, the Northwest Missouri State College library, and other libraries in the area to make more resources available to those students attending Missouri Western College.

ADMISSION REQUIREMENTS

1. From High School

Graduates of accredited high schools in Missouri are eligible for admission without examination. Graduates of accredited high schools in other states must present credits that would indicate the prospective student could do at least average work at Missouri Western College.

2. By Transfer From Other Colleges and Universities

A student who has attended another institution or institutions of college level must present a transcript or transcripts of credit with his application for admission. No transfer student is considered officially enrolled until all college transcripts have been received and evaluated. Transcripts presented after registration may result in a late enrollment fee.

REGISTRATION

A person who plans to enroll in Missouri Western College will follow the procedures shown below.

1. Submit an Application for Admission provided by the Registrar's Office.
2. Submit a medical health form provided by the Registrar's Office.

3. Have an official eight semester transcript of high school record sent to the Registrar's Office.
4. Arrange to take the Missouri Colleges Cooperative Test Battery.

The above tests may be taken on a designated Saturday in April at the College or at other testing centers in northwest Missouri on certain Saturdays. Dates are announced each spring.

These tests are the Missouri English Placement Test, the School and College Ability Test, and the Missouri Mathematics Placement Test. The test scores become a part of the student's permanent record. There is no charge for the tests if they are taken on one of the previously designated Saturdays. If, however, the tests are taken at another time, a fee of \$3.00 will be assessed.

Transfer students must take the tests if they have less than sixteen hours credit. If the scores are on record at another school, they may be transferred to Missouri Western at the request of the student.

5. Plan to visit the College during the summer for registration purposes.
6. Report for orientation.

All new students, freshmen and transfers, must attend orientation. An attempt is made to acquaint the new student with the traditions, some of the regulations, and the activities of the College.

NOTE: No student will be permitted to enroll in a course after classes have been in session for one week, except in extraordinary cases when he may be permitted to enter during the second week by special arrangement with the Dean of Academic Affairs and the instructor involved. A late registration fee of \$5.00 is required of all students who enter after the regular period of registration has ended.

SPECIAL STUDENTS

Persons over twenty-one years of age who have not completed requirements for admission, and who present evidence of special preparation and attainment, may be admitted to the College as special students. These students may become candidates for degrees when regular admission has been established or when the entrance deficiencies have been removed by showing college level abilities through maintenance of at least a "C" average in the first thirty hours attempted.

Special Students are required to take all examinations in their courses and are subject to the same scholastic requirements as other students.

NOTE: Students in the lower ten per cent of their graduating class and with low placement test scores may be accepted as special students on probation. They may be dismissed at the end of any grading period for lack of scholastic progress. Under certain conditions, it may be required that these students register for remedial courses; then, if their academic capabilities are satisfactory, they may enroll in regular college courses.

FOREIGN STUDENTS

Since Missouri Western College does not have housing facilities, it is not presently in a position to encourage a large foreign student population. Foreign students should:

1. Rank in the upper half of their class in their homeland.
2. Be proficient in the use of the English language.
3. Be financially independent.
4. Make application for admission from their homeland, if seeking admission as first semester freshmen.
5. Have a cumulative grade point average of 2 on a 4 point scale, or the equivalent, if transferring from other institutions.
6. Pay the same non-resident tuition as that paid by out-of-state students.

GED TESTS

The General Education Development Tests are recognized according to the recommendation of the American Council on Education.

AUDITING COURSES

A student who desires to take a course without credit must register and pay the regular fee, but will not be required to take the examinations.

FEES

There is no tuition fee for students who are residents of the Missouri Western College District. However, all students, regardless of residence, must pay an incidental fee. Included in this incidental fee are the activity, library, and laboratory fees.

SCHEDULE OF FEES — 1968-1969

Fees are assessed on a credit hour basis. The rate of assessment will vary depending on the residency of the student. Fees for day, evening, and summer school are all computed on the same base—that is, on a credit hour. The fee schedule is as follows:

Resident of Missouri Western College District	
Non-resident (out of district)	\$ 5.00 per credit hour
Non-resident (out of state)	8.00 per credit hour
Miscellaneous Fees:	12.00 per credit hour
Matriculation Fee	\$5.00
Paid at registration by all students enrolling for the first time. Non-refundable.	
Registration Fee	5.00
Payable at the time of registration. Non-refundable.	
Late Registration Fee	5.00
Transcript Fee (after first request)	1.00

PAYMENT OF FEES

All fees will be payable in the Business Office during the second week classes are in session. Fee payment will be made according to the first letter of the student's last name and will follow this schedule:

A thru D	Monday
E thru I	Tuesday
J thru N	Wednesday
O thru S	Thursday
T thru Z	Friday

REFUND OF FEES

Refunds are given only to students who drop out of college entirely; no refund is given to students who drop individual classes or make schedule changes that result in a reduced semester hour class load.

1. Withdrawal during 2nd week of classes..... 80% Inc. Fee
2. Withdrawal during 3rd week of classes..... 50% Inc. Fee
3. Withdrawal after 3rd week of classes..... No Refund

RESIDENCE

A resident student is normally one who lives with his parents or legal guardian in the Missouri Western College District. An emancipated student who has resided in the District at least six months prior to his initial registration in the College will be considered a resident of the District.

An emancipated student is that person who has sustained himself in the Missouri Western College District for more than six months. Living at the expense of friends or relatives does not constitute emancipation. Marriage shall be regarded as effecting emancipation of minors, whether male or female, for the purpose of establishing residency.

Any student claiming residency in the Missouri Western College District may be required to furnish evidence to College officials to support his claim.

REQUIREMENTS FOR GRADUATION

Missouri Western College offers curriculums leading to degrees of Associate in Applied Science and Associate in Applied Business. All students must complete a minimum of 62 hours with a grade point average of 2.0 (C average) to qualify for the above degrees.

The following majors are offered in the two Associate Degrees:

- Associate in Applied Business
 - Secretarial Science
 - Mid-Management
 - Data Processing
 - Accounting
- Associate in Applied Science
 - Applied Data Processing
 - Drafting and Design Technology
 - Electronics Technology
 - Professional Pilot Training

The College offers a curriculum leading to a one-year Certificate in Secretarial Training.

A. General education requirements for the Associate Degrees:

Area I — Communications	
English Composition 12	3 hours
Public Speaking 13	3 hours

Area II — Social Sciences	
Selected from the following courses:	
American National Government 1,	
American State and Local Govern-	
ment 2, American History to 1865 7	
or American History Since 1865 8	3 hours

Area III — Humanities	
Selected from appreciation cor	
in Art, Music, or Literature	3 hours

Area IV — Physical Education	
Physical Education Activities	2 hours
Personal & Community Hygiene 31 2	2 hours

TOTAL	16 hours
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In addition to the general education requirements, each major will have additional specific requirements.

B. General education requirements for one-year Certificate.

Area I — Communications	
English Composition 12	3 hours

Area II — Social Sciences	
Selected from the following courses:	
American National Government 1,	
American State and Local Govern-	
ment 2, American History to 1865 7,	
or American History Since 1865 8	3 hours

Area III — Physical Education	
Physical Education Activities	1 hour

TOTAL	7 hours
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A student must complete a minimum of twenty-six semester hours to qualify for the above certificate.

A candidate for graduation is required to attend Commencement exercises.

In case of an extreme emergency, a permit to graduate in absentia may be obtained from the Dean of Academic Affairs.

STUDENTS PURSUING A FOUR-YEAR BACCALAUREATE DEGREE PROGRAM PLEASE REFER TO PAGE 47.

PART IV — Academic Policies and Regulations

GRADING SYSTEM

Grades used in evaluating the work of students are:
A - superior; B - good; C - average; D - inferior; F - failing.
Grade points are earned according to the following schedule:

- A = four points for each hour of credit
- B = three points for each hour of credit
- C = two points for each hour of credit
- D = one point for each hour of credit
- F = no points and no credit

Grade points are used to compute a student's GPA (grade point average) which in turn is used to determine his class standing and eligibility for graduation, the Dean's Honor List, the President's Honor List, and the national scholastic honor fraternity, Phi Theta Kappa. GPA is determined by multiplying the credit hours by the grade points for each course and totaling them. This total is divided by the sum of the attempted credit hours.

COURSE LOAD

The maximum number of hours, exclusive of courses in physical education and music activities, to be carried by a student is sixteen a semester; however, there are exceptions. Students in engineering may carry loads comparable to those permitted by the institution to which they wish to transfer. Moreover, students whose cumulative grade point average is above 2.75 may enroll in seventeen semester hours, exclusive of physical education and music activities. Students with a cumulative grade point average of 3.00 may enroll in eighteen semester hours, exclusive of physical education and music activities.

Students who find it necessary to work in order to attend Missouri Western College should adjust their course load to their work load. Students should use the following schedule to determine their course load.

Hours Worked Per Week	Course Load
15 - 20 hours	12 semester hours
20 - 30 hours	9 semester hours
30 - 35 hours	6 semester hours
35 - 40 hours	3 semester hours

TRANSCRIPTS

All information in each student's personal college record folder is considered confidential information and is issued only to authorized recipients. Grades are never given over the telephone. The College will issue official transcripts of academic records only upon a written request by the student.

Each student will be issued one transcript free of charge. For each additional transcript, a fee of \$1.00 is charged.

A transcript will not be issued when the student is delinquent in payment of tuition and fees, library fines, has failed to return library books, or has other obligations to the College.

MINIMUM REQUIREMENTS

No policy of the College is intended to discourage the sincere, conscientious student, even though his achievement may not place him in the upper rank of students.

At the same time, each student is expected to make reasonable progress toward graduation. Grade averages for students are figured at the end of each semester. Students whose progress is partially sub-standard are placed on scholastic probation, and others who fail to meet prescribed minimum requirements may be withdrawn. The provisions for scholastic probation and suspension are as follows:

A. Scholastic Probation

1. Any first semester student whose grade point average is below 1.5 is placed on scholastic probation.
2. Any student whose cumulative grade point average is below 1.75 is placed on scholastic probation.
3. A student must obtain a cumulative grade point average of 1.75 to remove his probation status. Students should refer to Item 3, under Scholastic Suspension to ascertain how probation may lead to suspension.

B. Scholastic Suspension

1. Any first semester student whose grade point average is below .5 is automatically suspended.
2. Any other student whose term grade point average is below 1.25 is suspended.
3. A student placed on probation at the end of his first semester who fails to raise his cumulative grade point average to 1.5 or higher in the semester following his being placed on probation will be suspended for one semester.
4. Any student on probation for the second consecutive semester who fails to raise his cumulative grade point average to 1.75 or higher is suspended.
5. Any student making a 2.00 term grade point average will be considered doing satisfactory work, but will continue on scholastic probation if his cumulative grade point average is lower than 1.75.
6. A student suspended from Missouri Western College who feels his case warrants special consideration may petition the Scholastic Standards Committee. Mitigating circumstances must be very grave in order to secure reinstatement, and when reinstatement is granted, it will, of course, be on a probationary basis.
7. Prospective students on scholastic suspension from other institutions are ineligible to enroll at Missouri Western College until one semester has lapsed.

READMISSION

A student placed on scholastic suspension for any of the above reasons may be readmitted after the lapse of one semester, subject to the following conditions:

1. That he file a written petition for return and be accepted by the Scholastic Standards Committee.
2. That he fail no course and earn a minimum grade point average of 1.75 in any grading period.
3. That he carry a maximum load of twelve hours the first semester.
4. That his attendance be regular and punctual.

REPEATING COURSES

Normally a student who has made "D" or "F" in a course may be permitted to repeat the course. The same policy applies when the record shows "withdrawn failing." Grade points earned in the second attempt are used in calculating grade point averages.

WITHDRAWAL FROM COLLEGE

Students who, for any reason, find it necessary to withdraw from college during the course of a semester, are required to notify the Dean of Student Affairs, who in turn will notify the Registrar. The Registrar will notify each instructor and request that he return the student's course card. On the course card, the instructor will record the date of withdrawal and mark it appropriately. Since honorable dismissal is ordinarily required for transfer from one college to another, a student should not discontinue his college work without formal withdrawal. Students who do not withdraw officially will have "failing" recorded in all subjects.

WITHDRAWAL FROM CLASS

1. A student may withdraw "W" from a CLASS until the end of the sixth week.
2. A student may withdraw "WP" or "WF" from a CLASS from the beginning of the seventh until the end of the tenth week. After the end of the tenth week, a student cannot withdraw from a CLASS.
3. When a student withdraws from COLLEGE after the sixth week, his status in each subject must be recorded "WP" or "WF," not "W."
A "W" or "WP" grade does not count as courses attempted.
A "WF" does count as a course attempted, but may be removed by repeating and earning a higher grade. The same is true of any course repeated.

AN INCOMPLETE GRADE MUST BE REMOVED SIX WEEKS AFTER THE CLOSE OF A SEMESTER OR THE GRADE WILL BE RECORDED AS "FAILING."

CLASS ATTENDANCE

Regular attendance is required as evidence of a student's active interest in completing the work for which he enrolled. There is no such thing as a permissible number of deliberate cuts. Irregular attendance will be sufficient cause for dropping a student from class. Students with consecutive absences due to illness will be given sympathetic consideration. It is not the policy of the College to deal harshly or unfairly with any student who is absent for legitimate reasons.

MAKE-UP WORK

When an announced examination falls on the day a student is absent, instructors are not required to prepare or give a make-up test. However, no one wishes to work a hardship on any student, and, in the case of genuine illness or emergency, it may be possible to arrange with the instructor for a make-up test to be given. A fee of one dollar (\$1.00) is charged for this service and is payable in the Business Office.

TRANSFER CREDIT

A student may transfer from Missouri Western College to another college at the end of any semester. Most schools require a 2.0 average. Usually, the maximum number of hours that will transfer from Missouri Western to a four-year college or university is 64. There are some exceptions—for example, pre-engineering students may transfer 70 to 80 hours.

If a student should encounter any difficulty in the evaluation of credits in transfer, he should notify the Registrar's Office at Missouri Western College.

DISMISSAL

A student whose performance appears to offer little prospect for success, or whose conduct is such that his continued presence would be detrimental to the College, may be dismissed without privilege of reinstatement.

DEAN'S HONOR LIST

An honor list is published at the end of each semester. To be included on the Dean's List, a student must be carrying twelve or more hours of work with a grade point average of 3.0 or higher.

PRESIDENT'S HONOR LIST

A President's List is published at the end of each semester. To be included on the List, a student must be carrying twelve or more hours of work with a grade point average of 4.0.

GRADUATION HONORS

Students who have earned a minimum of 62 semester hours of credit, as required for graduation, with a grade average of 3.9 or higher, will be graduated with Highest Honors (summa cum laude). Those who have earned a grade average of 3.75 or higher, but below 3.9 will be graduated with High Honors (magna cum laude). Those who have earned a grade average of 3.5 or higher but below 3.75 will be graduated with Honors (cum laude).

SUMMER PROGRAM

Missouri Western College Summer Sessions are designed for:

1. Students who wish to accelerate their progress.
2. Students who carry only a partial course load during the regular semesters.
3. Students who have academic deficiencies which they wish to correct.
4. June high school graduates who wish to get an advanced start in their college studies.

Missouri Western College welcomes students from other collegiate institutions.

EVENING PROGRAM

Missouri Western College offers evening programs in all divisions. These courses benefit our regular college students and those in the community who wish to pursue a college education, improve their professional competencies, gain increased occupational skills, or simply acquire a broader background of cultural knowledge.

PART V — Student Services

COUNSELING AND GUIDANCE

All Missouri Western College students are required to take the "School and College Ability Test," the "Missouri English Placement Test," and the "Missouri Mathematic Placement Test." These tests are not entrance examinations, but they are of assistance in counseling students regarding course selection and problems of an academic nature.

Students are assigned an academic adviser at the beginning of their freshman year. Usually this adviser is a member of the faculty who has particular interest or training in the student's proposed area of concentration. While the student himself is responsible for meeting graduation requirements and requirements for transfer to other colleges or universities, he is given every opportunity for academic counseling.

In addition to his academic adviser, every student is free to avail himself of the opportunity for counseling offered in the office of the Dean of Student Affairs. Such counseling may involve choice of a college or university to which the student may transfer at the junior level, questions dealing with vocational choice, or personal problems related to school and life adjustments.

The counselor-adviser system attempts to (1) help the student reach a state of self-reliance through a clearer understanding of his own capacities and habits, (2) assist him in analyzing and handling any difficulties he may have in his program of study, (3) provide him with information about the occupational world, and (4) help him with a proper transfer to whatever college he may subsequently attend, or to obtain suitable employment as he ends his formal training with Missouri Western College.

STUDENT CENTER

The "Grotto," located in the basement of the Student Union Building, is a place where Missouri Western students may go to relax or to enjoy a cup of coffee or a light lunch.

PART VI — Student Activities

Missouri Western realizes that academic achievement is the primary reason that students attend college. Extra-curricular activities, however, are a necessary part of education, and the experience gained from membership in a campus organization is most important. The fellowship and insights gained in meeting with fellow students in other than a classroom situation should be experienced by each student at Missouri Western.

Missouri Western College provides a wide range of extra-curricular activities in which students may participate. The number of activities sponsored is determined largely by interest on the part of the students and the time they have to devote to participation.

In addition to intercollegiate basketball, a program of intramural sports is available.

Several dances, including the traditional "Ice Breaker," the Homecoming Dance, and the Spring Formal, are a part of the social activities. Clubs and organizations provide opportunities for students to develop special interests in company with others.

Two publications are available to all students: The GRIFFON NEWS, the College newspaper, and the GRIFFON, the yearbook. Staff workers are needed by both publications.

The drama program includes the presentation of at least one play each semester.

Included in the convocation programs provided each year are outstanding lecturers and artists who make it possible for a student to enrich his store of knowledge and broaden his cultural and intellectual horizons. At least one "big-name" attraction is planned each year.

The Music Department presents several delightful programs during the year. Activities include membership in the choir, band, and ensembles.

The following are activities in which Missouri Western College students may participate:

MISSOURI WESTERN COLLEGE STUDENT SENATE

The Student Senate is composed of elected members of the student body. Its purposes are:

To secure cooperation between the administration and the student body; subject to approval by the administration, to make laws governing the student body; to encourage and foster interest and enthusiasm in all Missouri Western activities and traditions.

STUDENT UNION BOARD OF CONTROL

This board, consisting of five elected students and a faculty adviser, concerns itself with the activities and operation of the student union. It has been active in providing events, such as shows in the Grotto, and sponsoring trips to professional football games.

PHI THETA KAPPA FRATERNITY

Purpose: To encourage high scholastic standards.

Entrance Requirements: This is the national scholastic honor organization of the College, corresponding to Phi Beta Kappa in a four-year college. To be eligible for Phi Theta Kappa membership, a student must have a semester enrollment of twelve or more credit hours and obtain a GPA of from 3.1 to 3.5, depending upon the number of hours he is carrying. Students are pledged, after meeting the above standards, if they are in the upper ten per cent of the student body. If the student maintains this average for an additional semester, he is then initiated into the organization. Not more than ten per cent of the entire student body may be chosen.

THE MACE

Purpose: The Mace was organized in 1926 in order to encourage constructive student activity in the service of the College.

Entrance Requirements: Membership in The Mace is based upon activities and services to the College. In the fifteenth week of the first semester, the three members of The Mace select three sophomores to membership, and in the fifteenth week of the second semester, the six members elect three freshmen to membership. There are no officers.

To be elected to The Mace by his fellow students is considered one of the highest honors that can come to a student.

ATHLETICS

An athletic program consisting of inter-collegiate competition in basketball, track, golf, and tennis is available to all eligible male students, and a well-organized program of intramural sports is offered to all students. Missouri Western College is a member of the Mid-Central Conference.

"M" CLUB

Purpose: To strengthen and preserve the sportsmanship, citizenship, and general wholesomeness acquired in intercollegiate athletics, Missouri Western College offers a club for varsity letter winners.

This club is governed by elected club officers under the supervision of the Athletic Department.

Entrance Requirements: Open to any student who has earned his "M" for any sport or athletic activity in Missouri Western College.

DELTA PSI OMEGA: National Dramatic Honor Society

Purpose: To encourage active and cooperative participation in the drama program of the College and to give students a broader outlook and a sense of unity with other college students of similar interest.

Entrance Requirements: Entrance is gained by acquiring a specified number of points representing participation in various dramatic activities.

FOREIGN LANGUAGE CLUBS

These clubs are organized either by separate languages or in combination, according to the desires of students and instructors. French and Spanish Clubs have been active each year and hold regular meetings.

Purpose: To provide additional opportunities for the student to develop his ability to speak and understand, especially in the area of social intercourse, the foreign language which he is studying. To provide greater understanding of the countries and the culture of the people using the language.

Entrance Requirements: Two years of a foreign language in high school or one year in college. Students in the first year classes are eligible the second semester.

MISSOURI WESTERN COLLEGE CHOIR

Purpose: (1) To study and perform distinguished musical literature. (2) To integrate the musical activities of the College with the cultural interest of the city and surrounding communities by giving a series of concerts.

Entrance Requirements: Open to all who sing, subject to the approval of the director.

BAND

Activated for the first time in 1967, this is a very active, growing organization. All students with instrumental experience are encouraged to join this group.

PSYCHOLOGY CLUB

Purpose: To increase student interest in psychology and in knowledge of its principles through discussion and experimentation and to extend the friendliness and comradeship of the College to the patients at the State Hospital.

Entrance Requirements: A sincere interest in psychology and a willingness to devote time to its study.

ALPHA DELTA KAPPA: Social Science Fraternity

Purpose: To stimulate interest in the social sciences, i.e., history, political science, sociology, and geography. To create a desire for more critical inquiry on the part of the student.

Entrance Requirements: Anyone interested in the social sciences, especially majors and minors in the field.

BUSINESS CLUB

Purpose: To further interest in the business field through lectures and other presentations.

Entrance Requirements: Students interested in business.

ENGINEERING CLUB

Purpose: To give the student a better understanding of the field of engineering and its application to industry. The club promotes fellowship among students of engineering.

Entrance Requirements: Open to any student interested in engineering, technical education, or science.

BAPTIST STUDENT UNION

Purpose: To provide a forum for integrating students' faith with expanding knowledge.

Entrance Requirements: The majority of the members are of the Baptist faith, but membership is open to anyone.

NEWMAN CLUB

Purpose: The Newman Club believes that the Church must involve itself with the institutions of higher education if it is to carry out its mission to society.

Entrance Requirements: It is open to anyone concerned with a mature Christian faith that is viable and meaningful in the modern world.

PUBLICATIONS

Griffon News. The college newspaper is published once each month through the year. Students in the journalism class handle the various assignments.

Griffon Yearbook. Student life for a school year is in the yearbook. The editor is chosen on the basis of work in high school. The entire staff is voluntary. Cost of the yearbook is paid by activity ticket funds and a copy of the **Griffon** is mailed to each student.

PART VII — Scholarships and Student Aid

Several types of scholarships and forms of financial aid are available to those who can qualify when they enter Missouri Western College.

MISSOURI WESTERN COLLEGE HONOR SCHOLARSHIPS

Missouri Western College offers honor scholarships each year to graduates of high schools in the College District. The scholarships cover the cost of the incidental fee. Only one may be offered each year to each high school in the district.

To be eligible the student must:

1. Rank in the upper ten per cent of his graduating class.
2. Rank higher than the seventy-fifth percentile on the Ohio State Psychological Senior Test.
3. Be recommended by his high school principal.
4. Not be the recipient of another college scholarship.

The scholarships may be renewed for each semester if the student maintains a grade point average of 2.5 or better the first semester, and 3.00 thereafter.

COLLEGE ART AND MUSIC SCHOLARSHIPS

Art Scholarships

The Board of Trustees has voted to offer two scholarships each year in the amount of fees to students who show particular ability in the field of art. Such selections should be made by the Scholarship Committee with recommendations from the art instructors.

Music Scholarships

The Board of Trustees has voted to offer five scholarships each year in the amount of fees to students who show particular ability in the field of music. Such selections should be made by the Scholarship Committee with recommendations from the music instructor.

ATHLETIC SCHOLARSHIPS

The Board of Trustees has agreed to give a number of athletic scholarships to male students who plan to participate in basketball. These athletic scholarships are awarded at the recommendation of the basketball coach and with the approval of the Scholarship Committee. The Scholarship is a waiver of all or part of the tuition and fees incurred at Missouri Western College.

MEMORIAL SCHOLARSHIPS

Dr. Wayne Toothaker Scholarship Award By the will of the late Dr. Wayne Toothaker, a sum of \$5,000 was invested, the interest from which is to be awarded to a student who expects to enter the medical profession and is taking the first two years of the pre-medical course at Missouri Western College. Application is made to the Scholarship Committee.

Anne Lowell Wells Fund This fund was created by the International Relations Club and furthered by the Cheshire Cheese Club in memory of Miss Anne Lowell Wells, a deceased member of the faculty. The interest from this fund is available to a deserving student who is attending Missouri Western College.

Harry Monson Memorial Fund The Harry Monson estate, through the Downtown Rotary Club of St. Joseph, donated \$2,500 to be used for scholarship purposes. \$2,000 of this total is invested and the earnings will be used to grant some young person a scholarship in the name of Harry Monson.

A. J. Einbender Memorial Scholarships This fund was created by Sylvia, Lester, Alvin, Edwin, and Larry Einbender in memory of A. J. Einbender, founder of the A. J. Einbender firm. Two scholarships of \$175.00 each will be granted to Missouri Western College students. Application is made through the Scholarship Committee.

The Culver-Gettys Memorial Scholarship This scholarship is given in memory of Mr. Charles M. Culver and Captain Hugh M. Gettys. The scholarship is to be awarded to a young man or woman who has completed a minimum of 28 college hours. The student must have a cumulative grade point average of 2.75 or better, and show evidence of need of financial assistance. The scholarship shall be in the amount of \$63.00 for the first semester; and, if the student continues to achieve a cumulative grade point average of 2.75, it may be continued for the second semester. Preferably, the student should be planning to go into Education.

INDIVIDUALS AND ORGANIZATIONS

The Mr. and Mrs. Clark C. Glaze Scholarship A \$7,500 scholarship fund has been established by Mr. and Mrs. Clark C. Glaze, the interest from which is to be awarded to students at Missouri Western College. If used by a student taking a pre-medical course, the scholarship is to be known as the Emily B. Glaze Scholarship. If used by a student taking pre-engineering, the scholarship will be known as the Clark C. Glaze Scholarship. Application is to be made to the Scholarship Committee.

First National Bank Merit Scholarships These scholarships were established in 1961 by the First National Bank of St. Joseph as an expression of its interest in the importance of higher education and in appreciation of the contribution Missouri Western College is making for the betterment of St. Joseph and the surrounding area. Two scholarships are available each year, one to a graduate of a St. Joseph high school, and one to a graduate of any high school in the district. The scholarships cover fees and the cost of necessary text books. Ordinarily, the

scholarships are for one year only; the new recipients are named each year. However, should conditions warrant, a student can be awarded the scholarship for a second year. Application is made to the Scholarship Committee. From the applicants, the committee selects the two students who seem best qualified from the standpoint of scholarship and financial need.

National Association of Power Engineers, Missouri Chapter No. 1, St. Joseph This organization has made a scholarship available to a pre-engineering student who is in his freshman year and who expects to complete his second year at Missouri Western College. Application blanks are obtained from instructors who teach pre-engineering subjects. A committee made up of members of the Society makes the final selection.

C. R. Bray Annual Arts Award Established in 1959 by the Bray Studio, this award is an expression of interest in the future leadership of our community and country. The aim of this award is to encourage interest in higher education among students participating on high school and college annual staffs. Several awards are presented each year in the amount of \$50.00 or \$100.00 to worthy students in recognition of their outstanding achievement and services. Applications should be submitted to the Scholarship Committee.

The Ada Lyon Creative Writing Award The St. Joseph Women's Press Club offers an award of \$25.00 each year to the Missouri Western College student who submits the best example of creative writing. Members of the organization are the judges for this award.

B'Nai B'Rith Women's Division Selection is made from a list of eligible students by a committee from the organization. Two are selected. It usually amounts to one-half the incidental fee. This award has been made for 18 years.

American Business Women's Association Officers of the organization select the recipient. It ordinarily amounts to the incidental fee.

These awards are made on the basis of scholastic achievement and financial need. Information concerning applicants will be forwarded to officers of the organizations who will make the final selection, and inform the student well in advance of the time for final registration at the College.

Carolyn B. Ullman Teacher Education Scholarship The Missouri Congress of Parents and Teachers, aware of the shortage of teachers in the elementary field, offers a scholarship to students wishing to prepare to teach in the public elementary schools of the state of Missouri. The awards are based on: (1) character, (2) scholastic record, (3) aptitude for teaching, (4) sound health. Application forms may be secured from the Counseling Office.

American Association of University Women, St. Joseph Branch The St. Joseph Branch of the A.A.U.W. offers a scholarship to a high ranking sophomore girl at Missouri Western College. Application may be made for this scholarship through the College Counseling Office.

Missouri Society of Professional Engineers, Northwest Chapter Sophomore pre-engineering students at Missouri Western College and one other college in northwest Missouri are invited to apply for this award. Application is made through the Scholarship Committee, with final selection being made by a committee made up of members of the Society.

Northwest Missouri State College Scholarships These scholarships are awarded to high ranking sophomores who plan to enroll at Northwest Missouri State College at Maryville. Application is made through the Scholarship Committee.

University of Missouri Curator's Scholarships These scholarships are awarded on the basis of scholastic record achieved by the student during his two years at Missouri Western College. Application blanks may be obtained from the Counseling Office. The Scholarship Committee at the University of Missouri makes final selection.

Feeney Construction Company Scholarship This scholarship was established in November 1961, and first awarded to a member of the 1962 graduating class. It is expected to be made available to former graduates of one of the five St. Joseph high schools, in accordance with provisions established by the donor. Sophomores may apply to the Scholarship Committee in March.

The News-Press-Gazette English Scholarship The News-Press-Gazette Corporation offers each year an award of \$100.00 to the graduating student with the best record in English courses during the two years at Missouri Western. The recipient of this award is chosen by an evaluating committee from the English Department.

Buchanan County Medical Society Nursing Scholarship A \$6,000 scholarship endowment fund was established by the Buchanan County Medical Society to provide one or more scholarships for Missouri Western students enrolled in a nurses training program. Application should be made to the Scholarship Committee.

STUDENT LOAN FUNDS

Institutional Loan Missouri Western College has various student loan funds available to its students and prospective students. These funds are used to loan worthy and needy individuals the money necessary for their enrollment at this institution. The interest charge for the use of these funds is nominal. Liberal repayment schedules are available. Any interested individual is encouraged to visit or write the Financial Aids Office.

United Student Aid Fund Missouri Western College participates in the United Student Aid Funds program. This is a loan program whereby students are loaned necessary funds from their local banks. Applicants should contact their local bank or the Office of Student Personnel for more information.

National Defense Student Loans The National Defense Student Loan Program, established under Title II of the National Defense Education Act of 1958, is a long-term program from which eligible and deserving students may be granted substantial loans to supplement other income for educational purposes.

OTHER FEDERAL STUDENT AID PROGRAMS

Educational Opportunity Grants Students who qualify on the basis of need may apply for an Educational Opportunity Grant, made available under Title IV of the Higher Education Act of 1965. College officials recommend students making application for a government grant, loan, or employment, arrange a personal interview with the Financial Aids Officer.

College Work-Study Program Under Title I, Part C, of the Economic Opportunity Act of 1964, a student may be employed part-time while attending college. Part-time employment means working a maximum of 15 hours per week while classes are in session. Prospective students who qualify under the guidelines of the College Work-Study Program may be employed 40 hours per week in the summer months preceding the academic year.

STUDENT EMPLOYMENT OPPORTUNITIES

College Each year the College has need of students to assist in the library, the offices, the science laboratories, etc. An attempt is made to fill these jobs with capable, deserving people.

Community During the course of a year, as many as 65 to 75 per cent of the students will be gainfully employed in after-school hours. Many of the jobs the students hold are located through their own initiative. At the same time, the College receives requests each year from employers who are seeking part-time workers. Students who wish to be contacted when employers call should apply at the Financial Aids Office.

Many students are able to earn enough money while attending Missouri Western College to defray their current expenses and, in addition, save something toward their future college costs.

Students must seek a proper balance between their load of college subjects and their part-time employment. If one is heavy, the other should be reduced correspondingly. If it is absolutely essential that a student work unusually long hours on his part-time job, he may wish to consider taking longer than four semesters to complete his work at the College in order to establish the good scholastic record which will be very important to him later. Summer session courses may help in some instances.

PART VIII — Programs of Study

The following programs are for those who wish to receive occupational training at the one- and two-year level:

Associate in Applied Business

Accounting (Check with Department Head)

Data Processing

Mid-Management

Secretarial Science

Associate in Applied Science

Applied Data Processing

Drafting and Design Technology

Electronics Technology

Professional Pilot Training

One-Year Certificate

Secretarial Training

ASSOCIATE IN APPLIED BUSINESS

DATA PROCESSING

First Year

First Semester	Hrs.	Second Semester	Hrs.
English Composition 12	3	Business	
Introduction to Business 6	3	Communications 19	3
Business Mathematics Principles & Problems 8	3	Science Elective	5
Computer Science 75	3	Unit Record 22	3
Principles of Economics 1	3	Principles of Economics 2	3
		Physical Education Activity	1
	15		15

Second Year

First Semester	Hrs.	Second Semester	Hrs.
Elementary Accounting 100	3	Elementary Accounting 101	3
General Psychology 1	3	Computer Science 87	5
American Government/History	3	Business Statistics 3	3
Public Speaking 13	3	Principles of Management 104	3
Fine Arts Elective	3	Personal and Community Hygiene 31	2
Physical Education Activity	1		
	16		16

ASSOCIATE IN APPLIED BUSINESS

MID-MANAGEMENT

First Year

First Semester	Hrs.	Second Semester	Hrs.
Introduction to Business 6	3	Marketing 501	3
Principles of Economics 1	3	Principles of Economics 2	3
English Composition 12	3	Business Mathematics Principles & Problems 8	3
American Government/History	3	Public Speaking 13	3
Merchandising 500	3	General Psychology 1	3
Physical Education Activity	1		
	16		15

Second Year

First Semester	Hrs.	Second Semester	Hrs.
Elementary Accounting 100	3	Elementary Accounting 101	3
Humanities Elective	3	Personnel Management 504	3
Salesmanship 502	3	Principles of Management 104	3
Business Statistics 3	3	Science Elective	5
Advertising & Design 503	3	Personal and Community Hygiene 31	2
Physical Education Activity	1		
	16		16

ASSOCIATE IN APPLIED BUSINESS

SECRETARIAL SCIENCE

First Year

First Semester	Hrs.	Second Semester	Hrs.
Introduction to Business 6	3	English Composition 13	3
English Composition 12	3	Public Speaking 13	3
Typewriting 11* or 12	2	Office Machines 20	2
Shorthand 14* or 15	3	Typewriting 12* or 13	2
Business Mathematics 7	3	Shorthand 15* or 16	3
Personal and Community Hygiene 31	2	Humanities Elective	3
Physical Education Activity	1	Physical Education Activity	1
	17		17

*Students who have had one year of typewriting and/or shorthand in high school may not take these courses for credit but must pass a proficiency test before they can take Typewriting 13, etc. If they do not pass the proficiency tests, they must audit these courses.

Second Year

First Semester	Hrs.	Second Semester	Hrs.
Principles of Economics 1	3	Business Communications 19	3
Shorthand 16 or 17	3	Shorthand 17 or Elective*	3-5
Office Typing Problems 13 or Elective*	2-3	Secretarial Procedures 18	3
Elementary Accounting 100	3	American Gov./History	3
Records Management and Filing 21	2	Computer Science 75	3
General Psychology 1	3		
	16-17		15-17

*Suggested Electives

	Hrs.
Elementary Accounting 101	3
Principles of Economics 2	3
Unit Record 22	3
Computer Science 87	5

ONE-YEAR CERTIFICATE

SECRETARIAL TRAINING

First Semester	Hrs.	Second Semester	Hrs.
English Composition 12	3	Business Communications 19	3
Intermediate Typing 12	2	Elementary Accounting 100	3
Intermediate Shorthand 15	3	Office Typing Problems 13	2
Introduction to Business 6	3	Advanced Shorthand 16	3
Business Math 7	3	Office Machines 20	2
Physical Education Activity 1	1	Social Science Elective	3
	<hr/>	Physical Education Activity 1	1
	15		<hr/>
			17

This program is designed for students who have completed one year of high school typing and shorthand. If the student does not meet these basic requirements and desires the program, it must be recognized by the student that additional hours will be required to finish the program.

ASSOCIATE IN APPLIED SCIENCE

APPLIED DATA PROCESSING

First Year			
First Semester	Hrs.	Second Semester	Hrs.
Computer Science 75	3	Computer Science 76	3
Unit Record 10	5	Unit Record 11	5
English Composition 12	3	English Composition 13*	3
Algebra 3 or 5	3	Chemistry or Physics*	5
Physical Education Activity 1	1		<hr/>
	15		16

Second Year			
First Semester	Hrs.	Second Semester	Hrs.
Computer Science 143	3	Computer Science 153	3
Public Speaking 13	3	Unit Record 100	5
Introduction to Business 6*	3	Amer. Nat. Government 1	3
Personal and Community Hygiene 31	2	Elective (Computer Science Advanced Reading 163)*	3
General Psychology 1*	3	Music Appreciation 1	3
Physical Education Activity 1	1		<hr/>
	15		17

*Suggested courses only

13 hrs. Elective⁴⁴

64
51
13

63
15
48
51

ASSOCIATE IN APPLIED SCIENCE

DRAFTING AND DESIGN TECHNOLOGY

First Year			
First Semester	Hrs.	Second Semester	Hrs.
English Composition 12	3	English Composition 13	3
Introductory Chemistry 1	5	Applied Math 11	3
Applied Math 10	3	Descriptive Geometry 4	3
Engineering Drawing 1	3	Introductory Physics 1	5
Physical Education Activity 1	1	Physical Education Activity 1	1
	<hr/>		<hr/>
	15		15
Second Year			
First Semester	Hrs.	Second Semester	Hrs.
Public Speaking 13	3	Art Appreciation 1	3
Design Drafting	3	Drafting Production Illustration	3
American State and Local Government 2	3	Building Construction	3
Slide Rule 7	1	Estimating & Specifications	3
Surveying 6	3	Structural Drafting	3
Industrial Materials	3	Personal and Community Hygiene 31	2
	<hr/>		<hr/>
	16		17

ASSOCIATE IN APPLIED SCIENCE

ELECTRONICS TECHNOLOGY

First Year			
First Semester	Hrs.	Second Semester	Hrs.
English Composition 12	3	English Composition 13	3
Applied Math 10	3	Introductory Chemistry 1	5
Engineering Drawing 1	3	Applied Math 11	3
Basic Electricity 10	3	Vacuum Tube Characteristics 11	3
Introductory Physics 1	5	Physical Education Activity 1	1
	<hr/>		<hr/>
	17		15

Second Year			
First Semester	Hrs.	Second Semester	Hrs.
American State and Local Government 2	3	Humanities Elective	3
Advanced Communication Circuits 110	3	Industrial Electronics 112	3
Advanced Communication Lab 111	3	Slide Rule 7	1
D. C. Machines 13	3	A. C. Machines 113	3
Public Speaking 13	3	Transistors and Radio Service 114	3
Physical Education Activity 1	1	Personal and Community Hygiene 31	2
	<hr/>		<hr/>
	16		15

ASSOCIATE IN APPLIED SCIENCE

PROFESSIONAL PILOT TRAINING

First Year

First Semester	Hrs.	Second Semester	Hrs.
Private Flight 10	3	Commercial Flight I 14	3
Private Ground 11	3	Commercial Ground I 16	3
Algebra (3 or 5)**	3	Trigonometry 6	3
English Composition 12	3	Personal and Community Hygiene 31	2
Physical Education Activity	1	Elective*	3
Elective*	3	Physical Education Activity	1
	—		—
	16		15

**Algebra 3 or 5 must be taken concurrently with Private Flight and Private Ground first semester.

Summer

	Hrs.
Commercial Flight II 15	3
American Government	3
	—
	6

Second Year

First Semester	Hrs.	Second Semester	Hrs.
Instrument Flight 110	3	Instructor Flight 112	3
Instrument Ground 111	3	Physics 112	3
Physics 111	5	Public Speaking 13	3
Humanities	3	Elective*	3
Elective*	3		—
	—		12
	17		

*Electives are to be chosen from the following suggested block areas:

PHYSICS AND MATH

	Hrs.
Calculus 7	5
Calculus 8	5
Calculus 109	5
	—
	15
(Physics 122 and Physics 124 may then replace Physics 111 and 112).	

DATA PROCESSING

Computer Science 75	3
Computer Science 87	5
Unit Record 22	3
	—
	11

BUSINESS ADMINISTRATION

	Hrs.
Introduction to Business 6	3
Principles of Economics 1	3
Principles of Economics 2	3
Elementary Accounting 100	3
	—
	12

APPLIED DATA PROCESSING

Computer Science 75	3
Computer Science 76	3
Computer Science 143	3
Unit Record 22	3
	—
	12

BACCALAUREATE DEGREE PROGRAMS

Mimeographed copies of the general education requirements for all four-year degrees to be offered at Missouri Western College are available in the Registrar's Office. Students who are enrolled in a Baccalaureate program should follow these requirements.

Degrees to be offered are:

Bachelor of Arts

Bachelor of Science

Bachelor of Science in Education

Bachelor of Science in Business Administration

Bachelor of Technology

PART IX — Course Descriptions

DIVISIONS

DIVISION OF APPLIED SCIENCE AND TECHNOLOGY

DIVISION OF EDUCATION AND PSYCHOLOGY

DIVISION OF LIBERAL ARTS AND SCIENCES

COURSE NUMBERING SYSTEM

Courses numbered 1 through 99 are freshman level, college parallel, transfer courses.

Courses numbered 100 through 199 are ordinarily sophomore level, college parallel, transfer courses.

Courses numbered 500 and over are technical or terminal and usually will not transfer to a four-year college or university.

The College reserves the right to cancel, without notice, any course listed in this publication or to withdraw any course which does not have an adequate enrollment at the close of registration period.

Division of Applied Science and Technology

DIVISION CHAIRMAN

Grainger, Don — Department Head — Business and Economics

Marion, Glenn — Department Head — Engineering and Technology

Wood, William — Department Head — Computer Science

BUSINESS AND ECONOMICS
COMPUTER SCIENCE
ENGINEERING AND TECHNOLOGY

Department of Business and Economics

Grainger, Don L. — Department Head

Finders, Robert C.

Mitchell, Marian

Ownbey, Jane

Shrout, Ethel H.

Sireno, Peter J.

BUSINESS ADMINISTRATION
ECONOMICS
SECRETARIAL

BUSINESS ADMINISTRATION

- 3 Business Statistics** **Three hours credit**
Tabular and graphic methods, averages, dispersion, and skewness.
- 6 Introduction to Business** **Three hours credit**
Required of all freshman business majors. A study of the way business is organized and how it operates. It affords assistance in choosing an area of specialization and supplies background for more specialized courses that follow.
- 7 Business Mathematics** **Three hours credit**
A course to increase knowledge and skill in the computation of practical financial problems of a business, civic, and personal nature. The material covered should provide a computational basis for subsequent or concurrent courses in the field of business.
- 8 Business Mathematics Principles & Problems** **Three hours credit**
A study of the theory and application of the mathematics of business, including computational and theoretical concepts applicable to specialized areas. The material covered should provide a basis for subsequent or concurrent courses in the field of business. **Prerequisite:** One and one-half years of high school math or Fundamental Concepts of Mathematics 1 or Intermediate Algebra 3.
- 100 Elementary Accounting** **Three hours credit**
A study of the fundamental principles of accounting and their application. Analysis of the balance sheet and income tax statement in their usual and special forms. **Prerequisite:** Introduction to Business 6.
- 101 Elementary Accounting** **Three hours credit**
A continuation of the study of accounting principles and procedures with emphasis on the accounts of partnerships and corporations. **Prerequisite:** Elementary Accounting 100.
- 102 Business Law** **Three hours credit**
A study of the general principles of law relative to business. The law of contracts is emphasized, along with agency and employment and negotiable instruments.
- 103 Business Law** **Three hours credit**
A study of the general principles of law relative to business. The course includes the law of personal property, real property, partnerships, and corporations. **Prerequisite:** Business Law 102.

- 104 Principles of Management** **Three hours credit**
Solutions to management problems are studied through an examination of the functions of management, including organization, planning, operation, and control. The case method and research projects supplement the text material.
- 500 Merchandising** **Three hours credit**
Retail store operations, including location, layout, purchasing, inventory, and pricing are extensively explored.
- 501 Marketing** **Three hours credit**
The functions of marketing, channels of distribution, marketing institutions, and procedures are studied.
- 502 Salesmanship** **Three hours credit**
The study of selling methods, procedures, and policy. Personality development is stressed and actual sales demonstrations will be utilized.
- 503 Advertising and Design** **Three hours credit**
Color, design, display construction, equipment and sets are utilized to relate the purpose and function of retail sales promotion.
- 504 Personnel Management** **Three hours credit**
A study of the various techniques used to improve and maintain relations between employer and employee. Personnel policies and procedures, methods of wage and salary administration, and human behavior are involved.

ECONOMICS

- 1 Principles of Economics** **Three hours credit**
Emphasis on macro-economics concepts with special emphasis on production, employment, price levels, and utilization of monetary and fiscal policy for the maintenance of a stable economy.
- 2 Principles of Economics** **Three hours credit**
Emphasis on micro-economic concepts, problems inherent with individual firms and industry, principles of supply and demand, consumption and expenditure of individuals, and business fluctuations. **Prerequisite:** Principles of Economics 1.
- 5 Industrial Economics** **Three hours credit**
A study of costs of production, their determination and allocation, integrated with a study of the labor organization and fiscal policies of individual firms and the government. Course is oriented toward pre-engineering, pre-law students.

SECRETARIAL

11 Elementary Typewriting Two hours credit

Beginning course in typewriting which provides for the personal needs of students as well as serving as the beginning course for students wishing to continue with later courses for greater vocational skill. Emphasis is on operating techniques, and net speed of at least 25 words per minute must be attained for a passing grade. Course not open to students who have received one-half or one credit for typing in high school. Class meets four times each week.

12 Intermediate Typewriting Two hours credit

A continuation of Elementary Typewriting 11 with attention given to building speed and accuracy of writing. Typing skill is applied principally to business letters, tabulation, manuscripts and business forms. The student is expected to have a net speed of 40 words per minute. Course not open to students having received one and one-half or two credits for typing in high school. Class meets four times each week.

13 Office Typing Problems Two hours credit

Emphasis is on attaining acceptable office standards in typing business letters, office forms, legal material, numbers, and tabulation. Training in use of duplicating machines is included. Meets four times each week. **Prerequisite:** Two semesters college level typing or one year high school typing and one semester college typing

14 Elementary Shorthand Three hours credit

A beginner's course covering the fundamentals of Diamond Jubilee Shorthand. Elementary Typewriting 11 should precede or parallel this course. Course not open to students having received one credit for shorthand in high school. Preparatory English 500 or equivalent must precede or parallel this course. Meets five times each week.

15 Intermediate Shorthand Three hours credit

A continuation of Elementary 14. Daily dictation and practice in writing shorthand accurately and fluently. The student is expected to have a dictation speed of 60 words per minute, new material. Intermediate Typewriting 12 should precede or parallel this course. **Prerequisite:** Preparatory English 500 or equivalent.

16 Advanced Shorthand Three hours credit

A continuation of Intermediate Shorthand 15. Minimum dictation speed is 80 words per minute, new material. Emphasis is on vocabulary of various businesses. Practice in transcription speed building is emphasized. Meets five times each week. Intermediate Typewriting 12 or Office Typing Problems 13 should precede or parallel this course.

17 Secretarial Dictation and Transcription Three hours credit

More difficult reading material. Dictation speed, 100-120 words per minute. Transcription speed, 25-30 words per minute. Meets five times each week. **Prerequisite:** Three semesters college shorthand or one year high school shorthand and two semesters college shorthand plus typewriting.

18 Secretarial Procedures Three hours credit

Recommended for terminal programs. Provides working knowledge of secretarial duties and responsibilities. Filing is emphasized. Handling of mail, office routines, personality and human relations are considered. **Prerequisite:** Typing.

19 Business Communications Three hours credit

Provides study in principles of effective communication and applies principles to writing effective business letters and reports. Study is made of most oral and written communications used in business. Stress is placed on spelling and business vocabulary. **Prerequisite:** Preparatory English 500 and one semester college typewriting or equivalent.

20 Office Machines Two hours credit

Provides instruction and training in operation of more common office machines: key driven, ten key, rotary calculators. If students can type well, transcribing machines may be included if it has not been secured in Office Typing Problems 13. Meets four times each week.

21 Records management and Filing Two hours credit

Comprehensive study of basic filing rules, procedures, equipment, and management.

Department of Computer Science

Wood, William — Department Head

COMPUTER SCIENCE

COMPUTER SCIENCE

10 Unit Record **Five hours credit**

General introduction. Study of unit record equipment. General information for learning wiring methods used to obtain the various functions of IBM Unit Record Machines. Information needed to operate these machines. This includes covering purposes, features, functions, and operating procedures. Three hours of lecture and four hours of laboratory each week.

11 Unit Record **Five hours credit**

General introduction continued. This course is a continuation of Unit Record 10. Three hours of lecture and four hours of laboratory work per week. **Prerequisite:** Unit Record 10.

22 Unit Record **Three hours credit**

Basic introduction for business majors. Survey of unit record equipment. Operating procedures, functions, and general information. Designed for Business Department majors. Two hours of lecture and two hours of laboratory per week.

75 Computer Science **Three hours credit**

General introduction to electronics data processing. This course is a survey of computer equipment generations including terminology and man-machine communications existing to the current state-of-the-art applications.

Included will be explanations of methods through which computers accomplish their tasks. The capability of computers is stressed, dispelling the aura of mysticism which frequently surrounds data processing equipment, especially computers.

The contents of this course includes an introduction to basic number systems, logic operations, and all types of storage devices, along with the structure of the computers central processor and associated input-output equipment.

76 Computer Science **Three hours credit**

Scientific digital language. High level programming language. The study of the structure and facilities of current algorithmic, procedure oriented languages and their implementation, operation, and use in an operating system environment. Two hours of lecture and two hours of laboratory each week. **Prerequisite:** Computer Science 75 and College Algebra 5.

87 Computer Science**Five hours credit**

Business applications programming. Introduction to a high level programming language (Fortran) in the nonscientific disciplines. Early in the course the student will be able to write simple programs in the application area of accounting, production, statistics, economics, finance, marketing, personnel management, insurance, and transportation to be solved on our computer system. Three hours of lecture and two two-hour laboratory periods each week. **Prerequisite:** Computer Science 75.

100 Unit Record**Five hours credit**

Punched card applications. Study of applied data processing applications. Lecture and practical case studies provide an understanding of how machines and systems are combined. Three hours of lecture and four hours of laboratory each week. **Prerequisite:** Unit Record 11.

143 Computer Science**Three hours credit**

Symbolic digital language. Low level programming language. Logical basis of computer structure, machine representation of numbers and characters, flow of control instruction codes, addressing, input-output, subroutines, linkages, macros, interpretive and assembly systems general. The IBM 1130 assembly language will be complemented with an introduction to IBM 360 system assembly language. Two hours of lecture and two hours of laboratory each week. **Prerequisite:** Computer Science 75.

153 Computer Science**Three hours credit**

Introduction to information structures. Organizational optimization. Description of data base and its structure, the basic concepts of functions, arrays, records, files, trees, lists, linkages, serial and parallel files, and hierarchies of storage. Sorting and searching of information from files, referencing and processing techniques based on structure list processing, content addressing, and cross referencing of files. Two hours of lecture and two hours of laboratory each week. **Prerequisite:** Computer Science 143.

163 Computer Science Advanced Reading**Three hours credit**

Independent study in particular applications area of student interest. Material and coordination to be supplied by Computer Science Department head. **Prerequisite:** Consent of instructor.

Department of Engineering and Technology**Marion, Glenn E. — Department Head**

**ELECTRONICS TECHNOLOGY
ENGINEERING AND APPLIED SCIENCE
PROFESSIONAL PILOT TRAINING**

ELECTRONICS

- 10 **Basic Electricity** **Three hours credit**
Fundamentals of electricity as applied to electronics. Shop experience in the repair of home devices and simple circuits.
- 11 **Vacuum Tube Characteristics** **Three hours credit**
A study of vacuum tubes, their characteristics and applications. **Prerequisite:** Basic Electricity 10.
- 12 **Basic Communication Circuits** **Three hours credit**
The study and development of basic communication circuits, such as R.F. detectors, R.F. amplifiers, R.F. convertors, A.F. amplifiers, channel mixing and instrumentation. **Prerequisite:** Vacuum Tube Characteristics 11.
- 13 **D. C. Machines** **Three hours credit**
Introduction to D. C. machines, their operation and construction. Emphasis placed on its conductors and insulators, circuits, ohms law, power and energy. **Prerequisite:** Basic Electricity 10.
- 110 **Advanced Communication Circuits** **Three hours credit**
This course deals with such aspects of TV as the tuner RF-IF amplifier, detectors, video amplifier, picture tube, and instrumentation. **Prerequisite:** Basic Communication Circuits 12.
- 111 **Advanced Communication Lab** **Three hours credit**
This course deals with the deflection circuits common to TV. Emphasis is placed on vertical scanning, theory, function, pulse forming circuits, and high voltage generation. **Prerequisite:** Advanced Communication Circuits 110.
- 112 **Industrial Electronics** **Three hours credit**
Study of the properties of gas filled tubes, including thyratrons, ignitrons, and glow tubes. Industrial applications of electronic control to electronic timers, resistance welding controls, photo electric relays, motor and voltage controls. **Prerequisite:** Basic Communication Circuits 12.
- 113 **A-C Machines** **Three hours credit**
Introduction to A-C machines, their functions, construction and operation. Emphasis placed on alternating circuits and measurements, inductance, capacitance, resistance circuits, and power factors. **Prerequisite:** Basic Electricity 10.
- 114 **Transistors and Radio Service** **Three hours credit**
A study of transistors, amplifiers, oscillators and their application. In addition, laboratory time is devoted to the service and repair of radios. **Prerequisite:** Advanced Communication Circuits 110.

ENGINEERING AND APPLIED SCIENCE

- 1 **Engineering Drawing** **Three hours credit**
This course deals with representation of communication phase, including the fundamentals of projection and training in shape and size description. The problems in the course deal with orthographic projection, auxiliary views, sectional views, detail and assembly drawing. One lecture and two two-hour laboratory periods each week.
- 3 **Architectural Drawing** **Three hours credit**
An introductory course to architectural drawing, chiefly with domestic architecture. The drawing and planning of floor plans, elevations, pictorial drawings, and the application of carpentry in house construction. Two three-hour laboratory periods each week. **Prerequisite:** Engineering Drawing 1.
- 4 **Descriptive Geometry** **Three hours credit**
A continuation of Engineering Drawing 1, dealing with the application of the theory of projection to the solution of space problems. The problems deal with points, lines, planes, intersections, and graphical problems of particular interest to the engineer. Two two-hour laboratory periods per week. **Prerequisite:** Engineering Drawing 1.
- 6 **Surveying** **Three hours credit**
An introductory course dealing with the fundamental principles of surveying, use and adjustment of ordinary surveying instruments. Lectures, laboratory and field trips. **Prerequisite:** Engineering Drawing 1 and high school trigonometry.
- 7 **Slide Rule** **One hour credit**
The theory and use of the slide rule as applied to engineering problems such as multiplication and division, square root, cube root and cubes, logarithms, and trigonometric functions. **Prerequisite:** trigonometry.
- 10 **Applied Math** **Three hours credit**
Emphasis is placed on practical technical applications. The following topics are considered: Slide rule, common and decimal fractions, percentage, discount ratio, proportion, density and specific gravity and logarithms.
- 11 **Applied Math** **Three hours credit**
A continuation of Applied Math 10. Geometry concepts, areas and angles, tangents, locus triangles, polygons, cylinders, cones, and solution of right triangles, radians, circular functions. **Prerequisite:** Applied Math 10.

- 12 Industrial Materials** **Three hours credit**
A study of the manufacturing processes and properties of materials used in industry. Metal alloys, cement, clay, plastics, fuels, etc. **Prerequisite:** Preceded or accompanied by Introductory Chemistry 1.
- 113 Estimating and Specifications** **Three hours credit**
A study of the basic information on estimating and specification writing to aid the student, contractor, and builder in making quick, accurate quantity take offs and labor estimates. The emphasis is on accurate analysis of the working drawings and specifications. **Prerequisite:** Building Construction Drafting.
- 114 Elementary Structural Design** **Three hours credit**
This course consists of a limited number of drawings dealing with various structural members of a building, such as H columns, steel fabrication, floor beams, concrete. From structural drawings, force, components of force, and moment of forces are studied. Some work is also devoted to the "strength of materials." **Prerequisite:** Applied Math 10 and 11 and Introductory Physics 1.
- 115 Production Illustration** **Three hours credit**
A drafting course dealing only with picture drawing, converting working drawings into three-dimensional picture drawings. The drawing of exploded picture views of a machine to help speed up the assembly of machines. Some free-hand drawing is encountered, along with the use of air brushing to obtain shade and shadow effect on picture drawings. **Prerequisite:** Engineering Drawing 1 and Design Drafting.
- 152 Statics** **Three hours credit**
Engineering problems of equilibrium, vectors, force systems, trusses, friction, centroids, and moment of inertia are covered. Three lecture periods each week. **Prerequisite:** Physics 123 and Calculus 109. Calculus 109 may be taken concurrently.
- 153 Dynamics C. E.** **Three hours credit**
A study of motion of a particle, kinetics of rigid bodies, work and energy, impulse and momentum. **Prerequisite:** Statics 152.
- 155 Circuit Theory 1 Ec.** **Four hours credit**
A study of circuits using resistances, capacitance, and inductions with various types of driving sources. Lecture and lab. **Prerequisite:** Calculus 7 and 8 and Physics 123.
- 156 Circuit Theory 11 Ec.** **Four hours credit**
Alternating current circuits, inductively coupled circuits, polyphase circuits, fourier analysis. **Prerequisite:** Circuit Theory 1 Ec. 155.

PROFESSIONAL PILOT TRAINING

- 10 Private Flight** **Three hours credit**
A study and practical application of the flight maneuvers necessary to qualify for a private pilot, single engine, Land Certificate issued by the federal government. The course encompasses pre-flight of aircraft, safety, starting, taxiing, take-offs, basic air maneuvers, and landings. Algebra 3 or 5 must be taken concurrently.
- 11 Private Ground** **Three hours credit**
A study and practical application of aeronautical knowledge other than flight, necessary to qualify for a private pilot, single engine, Land Certificate issued by the federal government. This course covers a study of pre-flight facts, instruments and systems, weights and balances, meteorology, flight computer, navigation, radio navigation, radio communications, and Federal Aviation Authority's regulations. To be taken concurrently with Private Flight Course 10.
- 14 Commercial Flight I** **Three hours credit**
A continuation of the flight training program that enables the student to qualify for his commercial license. This course encompasses much broader concepts of pre-flight, aircraft, safety, starting procedures, taxiing, take-offs, air maneuvers, and landings.
- 15 Commercial Flight II** **Three hours credit**
A continuation of Commercial Flight I. May be taken at the convenience of the student and the flight school.
- 16 Commercial Ground I** **Three hours credit**
A course in advanced weights and balances, advanced meteorology, advanced flight computers, navigation and radio, Federal Aviation regulations, and flight maneuvers.
- 110 Instrument Flight** **Three hours credit**
A study of flight maneuvers and planning by sole reference to flight instruments. This course covers areas in flight under instrument conditions. The course is designed to enable the student to fly without visual reference to the ground, relying entirely on his instruments.
- 111 Instrument Ground** **Three hours credit**
A course designed to familiarize the student with all instruments and systems, instrument flight rules, flight charts, instrument flight rules and regulations, shorthand clearances, instrument flight rules planning, visual omni-range flight procedure, instrument landing systems, and automatic direction finder approaches.
- 112 Instructor Flight** **Three hours credit**
A course designed for students who wish to become instructors in some phase of flight training. This course stresses the refined instructions of all courses taken, with special emphasis on proper teaching procedures, enabling the student to impart flight and ground course information to others.

Division of Education and Psychology

DIVISION CHAIRMAN

Burri, Charles — Department Head — Physical Education

Gettys, Helen C. — Department Head — Psychology and Elementary
and Secondary Education

PHYSICAL EDUCATION

PSYCHOLOGY AND ELEMENTARY
AND SECONDARY EDUCATION

Department of Physical Education

Burri, Charles R. — Department Head

Greene, Bonnie J.

Long, James

Pettijohn, Harriett

PHYSICAL EDUCATION

PHYSICAL EDUCATION

Physical Education Activities

A physical examination is required for all physical education activities courses.

- 10 **Physical Development (Men and Women)** **One hour credit**
Emphasis is placed on developing muscle tone, endurance, and posture.
- 11 **Wrestling (Men)** **One hour credit**
Instruction in the fundamentals of wrestling techniques involving competition.
- 12 **Golf and Bowling (Men or Women)** **One hour credit**
Fundamentals, scoring, skill development, and etiquette of the activities. \$5.00 fee.
- 13 **Tennis and Badminton (Men or Women)** **One hour credit**
Fundamentals, scoring, skill development, and etiquette of the activities.
- 14 **Softball and Volleyball (Men or Women)** **One hour credit**
Development of fundamental skills with emphasis on the importance of team work.
- 15 **Modern Dance (Women)** **One hour credit**
Instruction in basic locomotor skills as related to music, with the development of individual and group creativity.
- 16 **Swimming (Men or Women)** **One hour credit**
Instruction in basic and/or advanced swimming.
- 17 **Folk and Square Dancing (Co-educational)** **One hour credit**
Development of skills, appreciation and enjoyment of folk and square dancing.

- 18 **Social Dancing (Co-educational)** **One hour credit**
Participation and practice in modern ballroom dancing and etiquette.
- 20 **History and Principles of Physical Education** **Two hours credit**
A basic course for students intending to teach physical education and/or coach athletic teams on the elementary or secondary school level. Course includes a thorough introduction to all aspects of physical education, beginning with an historical survey and covering the challenges of the present.
- 31 **Personal and Community Hygiene** **Two hours credit**
Courses designed to provide students with factual background for the health decisions they will be called upon to make while in college and after their college careers. Matters of personal health concerns are emphasized and family and community responsibilities are also covered.
- 41 **Recreation in Physical Education** **Three hours credit**
The course describes the general nature of recreation and physical education and outlines their interrelated development in the United States. Students in the course examine purported values of recreational physical education activities and evaluate various types and programs of these. They also study recommended organizational and administrative procedures necessary for the successful use of recreational activities in physical education programs. Present and probably future trends of recreation in physical education is researched. **Prerequisite:** Completion of 15 college hours.

**Department of Psychology and Elementary
and Secondary Education**

Gettys, Helen C. — Department Head

McCann, Willis H.

West, Kenneth D.

**EDUCATION
PSYCHOLOGY**

EDUCATION

- 2 **Introduction to Art** **Three hours credit**
See Art.
- 8 **Fundamentals of Music** **Three hours credit**
See Music.
- 31 **Personal and Community Hygiene** **Two hours credit**
See Physical Education.
- 66 **Children's Literature** **Three hours credit**
See Humanities and Communications.
- 100 **Educational Psychology** **Three hours credit**
See Psychology.
- 501 **Reading Improvement** **One hour credit**
One semester course designed to introduce the student to basic phonetic skills, vocabulary assessment and development, and skills and practice for the purpose of increasing his speed of reading, developing accurate symbol recreation, and increasing his percentage of comprehension of material read. Meets in two-hour session in the evening.

PSYCHOLOGY

- 1 **General Psychology** **Three hours credit**
Introduction to history, philosophy and scope of psychology; units on experimental and quantitative method and terminology, the nervous system, learning, motivation, personality, cognition, intelligence, personality and individual differences.
- 2 **Applied Psychology** **Three hours credit**
Application and extension of principles, especially in units on personal adjustment, personality, inter-personal relationships and vocational choice and adjustment. **Prerequisite:** Psychology 1 with a passing grade.

5 Psychology of Personality **Three hours credit**

Dynamics of personality and human behavior; study of basic nature and development of maturity, human motivation, individual adjustment, group behavior, personality and behavior theories. **Prerequisite:** Psychology 1 with grade of C or better.

100 Educational Psychology **Three hours credit**

Introductory professional course for the education major, stressing areas of psychology relevant to the educative process. Study of growth and development, individual differences, quantitative method, learning, concept development, problem solving, environmental influences and adjustments. **Prerequisite:** Psychology 1 with grade of C or better.

101 Industrial Psychology **Three hours credit**

Practical applications of psychology in business and industry. Consideration of personnel selection, use and misuse of psychological tests, personnel training and development, motivation, leadership and philosophy of management, business practices, counseling for management and employee. **Prerequisite:** Psychology 1.

102 Abnormal Psychology **Three hours credit**

Course designed to inform the student of behavior patterns outside the established norms, investigate causes, therapies, historical data and research in the area of understanding and treatment of existing abnormal behavior. **Prerequisite:** Psychology 1 with grade of C or better.

Division of Liberal Arts and Sciences

DIVISION CHAIRMAN

Agenstein, Evan R. — Department Head — Physics and Math

Force, Harry — Department Head — Biology

Lacy, Louise C. — Department Head — Humanities and Communications

Popplewell, Frank S. — Department Head — Social Science

Redmond, John — Department Head — Chemistry

Riemer, Roberta — Department Head — Fine Arts

BIOLOGY

CHEMISTRY

FINE ARTS

HUMANITIES AND COMMUNICATIONS

PHYSICS AND MATH

SOCIAL SCIENCE

Department of Biology

Force, Harry — Department Head

Crumley, Richard

Robbins, Donald J.

Wiese, William Roland

BIOLOGY

BIOLOGY

1 Principles of Biology **Five hours credit**

A course designed to provide an understanding of some of the principles of living phenomena. Three hours lecture, one three-hour laboratory, and a recitation period each week.

11 General Botany **Five hours credit**

A beginning study of plant science considering structure, physiology, simple taxonomy and ecological relationships. Three hours lecture, one three-hour laboratory, and a recitation period each week.

12 General Zoology **Five hours credit**

A beginning course in the study of animal life, stressing the evolution of a diversity of organisms adapted to a variety of environments through a phylogenic study of the animal kingdom. Included also are brief studies of the cell and of genetic principles. Three hours lecture, one three-hour laboratory, and a recitation period each week.

105 Conservation of Natural Resources **Three hours credit**

Major problems of conservation in the United States, such as soil, water, forests, minerals, etc., with a solution to conserve them wisely.

150 Physiology and Anatomy **Five hours credit**

A lecture and laboratory course designed to introduce the fundamental concepts of human function and structure and relate these concepts to cells, tissues, organs, and systems. Four lectures and one two-hour laboratory period each week.

160 Field Ecology **Three hours credit**

An introductory study of ecology stressing basic concepts and field techniques used in studying the relationships of organisms to their environment. **Prerequisite:** Zoology or Botany or the consent of instructor. One lecture and two two-hour laboratory periods each week.

170 Comparative Vertebrate Anatomy **Five hours credit**

Comparative studies of the embryology, morphology and physiology of selected vertebrates. Two hours lecture and six hours laboratory each week. **Prerequisite:** General Zoology 12.

199 Microbiology

Five hours credit

A survey of microorganisms including identification, characteristics, and importance of common forms; their application to the needs of man, i. e., infectious diseases and immunity, microbiology of air, water, foods and their uses in industrial and scientific processes. Three hours lecture and two two-hour laboratory periods each week.

502 Microbiology (for nursing students)

Three hours credit

A study of bacteria and other microscopic forms and their relation to disease. It includes the principles and procedures involved in asepsis, disinfection, sterilization, and immunization as related to nursing. Three hours lecture each week.

Department of Chemistry

Redmond, John — Department Head

Ballew, Elizabeth A.

Bensyl, Conrad N.

Heckel, Achsah M.

CHEMISTRY

CHEMISTRY

- 1 Introductory Chemistry** **Five hours credit**
A course designed for students of liberal arts, business, elementary education, and selected programs in secondary education. The relationships of science to the individual and society are explored through a study of basic principles and topics of chemistry. Credit reduced to two hours if student takes Chemistry 11 for credit. Three lectures, one discussion, and one three-hour laboratory a week.
- 11 General Chemistry** **Five hours credit**
Course introducing the basic concepts of chemistry to those who expect to continue in other chemistry courses. Course covers such subjects as atomic theory and periodic system, chemical calculations, oxidation-reduction, states of matter, and theory of chemical bonding, with consideration emphasis on atomic structures and application of principles. Three lectures, one discussion, and one three-hour laboratory a week. **Prerequisite:** Two units of algebra. High school chemistry is also recommended.
- 12 General Chemistry II** **Three hours credit**
A continuation of Chemistry 11 covering more advanced subject material. Includes a study of thermochemistry, equilibrium, electrochemistry, radiochemistry, and a systematic survey of the more important elements and their compounds, with emphasis on their periodic relationships. Three lectures a week. **Prerequisite:** Chemistry 11 with a grade of C or better.
- 13 Qualitative Analysis** **Two hours credit**
Separation and identification of some of the more common anions and cations by qualitative analysis. Application of the theories of chemical equilibrium. Introduction of quantitative analytical techniques and the use of instruments in the laboratory. Two three-hour laboratory periods a week. **Prerequisite:** Must be preceded or accompanied by Chemistry 12.
- 14 Honors General Chemistry** **Five hours credit**
Admission by selection of the Chemistry Department based on rank in high school graduating class and scores on College Entrance Examinations. A course designed to parallel Chemistry 11 for honor students only. Lecture covers same material as Chemistry 11. Discussion and laboratory cover more advanced topics than those in Chemistry 11. Normally followed by Chemistry 12. Three lectures, one discussion, and one three-hour laboratory a week. **Prerequisite:** Two units algebra and one unit high school chemistry or Chemistry 1.

- 100 Quantitative Analysis** **Four hours credit**
This course deals with the fundamental principles of analytical chemistry and their application in the laboratory. Gravimetric, volumetric, colorimetric, and the electroanalytical determinations are discussed and used in the laboratory. Particular emphasis is placed on use of the instrumental approach to analysis. Two lectures and two three-hour laboratory periods a week. **Prerequisite:** Chemistry 13 with a grade of C or better.
- 101 Elementary Organic Chemistry** **Three hours credit**
A terminal course in the fundamentals and reactions of both the aliphatic and aromatic series, together with their relation to life processes and everyday living. Two lectures and one three-hour laboratory period a week. **Prerequisite:** Chemistry 1 or 11 with a grade of C or better.
- 102 Organic Chemistry** **Three hours credit**
First semester of a full year course in organic chemistry. Study of methods of synthesis of organic compounds, reaction paths, chemical bonding, and geometry of organic molecules. Aliphatic and aromatic compounds are studied concurrently. Primarily for students in chemistry, medicine, dentistry, pharmacy, and medical technology. One hour credit if Chemistry 101 or its equivalent has been completed previously. Three lectures a week. **Prerequisite:** Chemistry 12 with grade of C or better.
- 103 Organic Chemistry Laboratory** **Two hours credit**
Laboratory course to accompany Chemistry 102. Two three-hour laboratory periods a week. **Prerequisite:** Chemistry 102 concurrently.
- 104 Organic Chemistry II** **Three hours credit**
Continuation of Chemistry 102. Three lectures a week. **Prerequisite:** Chemistry 102 with a grade of C or better.
- 105 Organic Chemistry Laboratory** **Two hours credit**
Laboratory course to accompany Chemistry 104. Two three-hour laboratory periods a week. **Prerequisite:** Chemistry 104 concurrently.
- 500 Principles of Chemistry** **Five hours credit**
Survey of chemistry for students of nursing. Includes inorganic, organic, and biochemistry with particular application to the field of nursing. Four lectures and one two-hour laboratory a week.

Department of Fine Arts

Riemer, Roberta — Department Head

Enyeart, James L.

Gilmour, F. Matthew

Groh, Sharon L.

Jenkins, Vernon

Sandstad, Neil A.

ART

MUSIC

ART

1 Art Appreciation **Three hours credit**

A course specifically designed for those with little or no experience in the visual arts (non-majors only). It attempts to provide a general background in the principles, techniques, history, and philosophy of the visual arts. Two lectures and one discussion session each week.

2 Introduction to Art **Three hours credit**

An introduction to the various media and concepts in studio art. Both studio and lecture sessions are included. This course is especially suited to education, as well as fine arts, credit. Class meets three periods weekly.

3 Introduction to Ancient and Medieval Art **Three hours credit**

A survey of the history of art in western civilization from the time of prehistoric man to the beginnings of the Renaissance. Specific artists and their works are dealt with, as well as the historical and cultural developments of the larger periods. Class meets three periods weekly.

4 Introduction to Renaissance and Modern Art **Three hours credit**

A continuation of Introduction to Ancient and Medieval Art 3, involving the study of the history of western art from the Renaissance to the present time. Class meets three periods weekly.

The following studio courses may be taken for two hours, rather than three hours, if desired. These classes will still meet for six periods weekly, whether they are taken for two or three hours credit, unless otherwise stated on the schedule.

5 Drawing **Three hours credit**

A foundation course in elementary drawing dealing with the figure, still life, landscape, and perspective in various media.

6 Drawing **Three hours credit**

An intermediate drawing course emphasizing the figure in various media. Consideration of the various approaches to drawing is stressed. This is a continuation of Drawing 5, which is also the necessary prerequisite (or its equivalent).

8 Watercolor **Three hours credit**

A beginning course in water media with emphasis on color, composition, and techniques. Class meets as scheduled. **Prerequisite:** Drawing 5.

9 Oil Painting **Three hours credit**

A beginning course in oil painting with emphasis on color, composition, and technique. The figure and still life comprise subject matter. **Prerequisite:** Drawing 5.

11 Design **Three hours credit**

A study of the elements and principles of design, their use and control, dealing principally in two-dimensional problems. Various media are employed.

12 Design **Three hours credit**

A study of form in the third dimension and design principles and elements as they relate to three dimensions. Various media are used. This course is of particular value in architecture, industrial design, and sculpture. **Prerequisite:** Design 11

13 Print Making **Three hours credit**

Study of wood block, etching, engraving, serigraph and lithography, dealing with each process's history and studio problems in each form. **Prerequisite:** Drawing 5.

107 Drawing **Three hours credit**

An advanced drawing course treating drawing as a complete form rather than as a sketch. This is a continuation of Drawing 6, which is also a prerequisite.

110 Oil Painting **Three hours credit**

A continuation of Oil Painting 9. More emphasis will be given to the individual student's problems with the medium and his aesthetic direction.

114 Print Making **Three hours credit**

A continuation of Print Making 13, with special attention to the student's own use of the medium. **Prerequisite:** Graphic Arts 13.

MUSIC

1 Music Appreciation **Three hours credit**

A course designed for those who have no formal background in the study of musical art. Presents the elements of music, music's place in life, the shorter and larger forms, program music, biographical and historical facts related to the development of the art of music.

4 Elementary Theory **Four hours credit**

Fundamentals of music, simple chord progressions, accessory tone, harmonizing melodies and figured bass, original composition, in simple two- and three-part form. Ear training, sight singing, and keyboard application of work studied in theory. Class meets five days each week.

5 Elementary Theory **Four hours credit**

Continuation of Elementary Theory 4, adding modulation and seventh chords. **Prerequisite:** Elementary Theory 4.

8 Fundamentals of Music **Three hours credit**

A course designed primarily for classroom teachers. It includes music fundamentals and the development of skills necessary for sight singing, writing simple songs, using rudimentary instruments and simple piano chording. Instruments of the orchestra are introduced.

9 Elements of Conducting **Two hours credit**

Basic baton techniques for all rhythm patterns. Score reading and analysis of vocal and instrumental music. Demonstration, discussion, and practice.

10 Elements of Conducting **Two hours credit**

A continuation of Elements of Conducting 9.

103 Introduction to Music Literature **Three hours credit**

A course to acquaint the student with outstanding bodies of music in the basic areas of vocal, keyboard, symphonic and chamber music. **Prerequisite:** Elementary Theory 4.

106 Advanced Theory **Four hours credit**

Continuation of Elementary Theory 5, adding extended use of sevenths, accessory tones, harmonic elaboration, originals in larger forms.

107 Advanced Theory **Four hours credit**

Continuation of Advanced Theory 106. Extended modulations, altered chords, introduction to present-day harmonic practice, original work in larger forms.

ORGANIZATIONS

- 11 Chorus** **One hour credit**
Open to all who sing. Designed to improve ability to sing with a group, to present a variety of styles of musical literature. May be repeated for credit. Class meets three times a week.
- 14 Band** **One hour credit**
Open to all students subject to the approval of the director. A course designed to improve the musicianship of the players and to acquaint them with some representative music literature. May be repeated for credit.
- 512 Choir** **No credit**
Limited membership — selected for tone production and musicianship. The group represents the college in public performances of sacred and secular works. Open to all qualified students.
- 513 Vocal Ensemble** **One hour credit**
Madrigal group from which could develop trios or quartets for public performance. Open to all students, subject to the approval of the director.
- 515 Stage Band** **No credit**
Select group for public performance. Open to all students, subject to the approval of the director.
- 516 Wind Ensemble** **No credit**
Select groups for students interested in chamber music performance.
- 517 String Ensemble** **No credit**
Group for performance with the choir in large productions and on other programs through the year. Open to all students, subject to the approval of the director.

CLASS LESSONS

- 18 Voice Class** **One hour credit**
Basic instruction in tone production, breath control, articulation, and interpretation. Open to all students, but especially for instrumental music majors. Three class meetings and daily practice required for credit.

- 19 Voice Class** **One hour credit**
Continuation of Voice Class 18.
- 20 Piano Class** **One hour credit**
Basic instruction in scales, chords, harmonizing melodies, transposition, and performance of simple literature. Open to all students, but especially for all music majors, except piano majors.
- 21 Piano Class** **One hour credit**
Continuation of Piano Class 20.
- 22 Beginning Strings** **One hour credit**
Class lessons in a playing knowledge of all string instruments with a concentration of one instrument, and with emphasis on the techniques of teaching instrumental groups. Open to all students, but especially to music education majors.
- 23 Advanced Strings** **One hour credit**
Continuation of Beginning Strings 22.
- 24 Beginning Wood Winds** **One hour credit**
Class instruction in the playing knowledge of all the wood wind instruments, with emphasis on solving problems met in teaching instrumental groups. Open to all students, but especially for music education majors.
- 25 Beginning Brass and Percussion** **One hour credit**
Class instruction in the playing knowledge of all the brass and percussion instruments, with emphasis on solving problems met in teaching instrumental groups. Open to all students, but especially for music education majors.
- 26 Applied (Private) Lessons** **One hour credit**
(Voice, piano, violin, trumpet, clarinet, percussion)
Two half-hour lessons, plus a minimum of one hour a day practice. Lesson time to be arranged at registration. Open to all students, but music majors given first preference in scheduling. Fee: \$35.00 per semester.

**Department of Humanities and Communications
and Modern Languages**

Lacy, Louise C. — Department Head
Doherty, Mary Lee
Durham, Lu
Ertman, Irene P.
Flanagan, Frances
Harden, Vernon W.
Hoffman, Rosemary
Meyer, Myron M.
Miller, Richard T.
Pitter, Herman A.
Smith, Frank R.
Taylor, Richard B.
Tomlinson, Veva B.
Vargas, Eduardo E.
Vehlow, Paula

ENGLISH

JOURNALISM

MODERN LANGUAGES

PHILOSOPHY

SPEECH AND THEATRE

ENGLISH

- 12 English Composition** **Three hours credit**
The work includes the study of the principles of composition, the writing of themes, conferences, special reading for composition and style. The main purpose is to develop the ability to think clearly and to write effectively. Entering freshmen scoring average or better on the Missouri Placement Test will be enrolled in this course.
- 13 English Composition** **Three hours credit**
Continuation of English Composition 12.
- 14 English Composition** **Three hours credit**
Special English. Similar to English Composition 12, but an enriched course. Open only to a small group selected from freshmen applicants with high class rank and high score on Missouri English Placement Test.
- 15 Introduction to Literature:
Fiction and Narrative Poetry** **Three hours credit**
The purpose of this course is to develop appreciation and a critical and discriminating understanding of the short story, the novel, and narrative poetry. The material is drawn from English, American, French, and Russian writers.
- 16 Introduction to Literature:
Drama and Lyric Poetry** **Three hours credit**
This course introduces the student to drama, through plays by Sophocles, Shakespeare, Sheridan, Barrie, O'Neill, and Eliot, and also includes an introduction to lyric poetry. As in Introduction to Literature 15, the general purpose is to develop appreciation, understanding, and judgment.
- 66 Children's Literature** **Three hours credit**
A course designed to give a knowledge of the fields of literature available for use in the elementary grades. Content is emphasized rather than methods. Story telling in its relation to teaching is illustrated and discussed.
- 100 English Literature** **Three hours credit**
A reading and discussion course tracing the outline of English Literature from the Old English period to 1785 and showing the relation of the writers to the life, thought, and literary tendencies of their own and other periods. **Prerequisite:** Six hours of freshman English Composition.

- 101 English Literature** **Three hours credit**
Continuation of English Literature 100.
- 102 American Literature to 1865** **Three hours credit**
A survey of American literature from Bradford to Lincoln, emphasizing the major writers and movements.
- 103 American Literature After 1865** **Three hours credit**
A survey of American Literature from Whitman to the present, emphasizing the major writers and movement.
- 104 Shakespeare** **Three hours credit**
A reading and discussion course, primarily for sophomores. Some freshmen with special interest or ability may be admitted. It includes the comprehensive study of six of Shakespeare's plays, two from each of the categories of comedy, history and tragedy. A cursory reading of several other plays will be expected. It is designed to give the student an awareness of the broad scope of the dramatist's writing and an appreciation of his style and poetry.
- 105 Exposition (Advanced Composition)** **Three hours credit**
This is a course for sophomores or freshmen from English Composition 14 who desire training in reading and writing beyond that offered in English Composition and Introduction to Literature. The students read and discuss plays, short stories, and poems, but the emphasis is on examining and writing expository pieces.
- 106 Narration** **Three hours credit**
A course for sophomores designed to acquaint them with the concepts of narration. It includes readings in the short story and the novel, presented as vehicles for teaching narration, and the writing of narrative pieces.
- 500 Preparatory English** **Three hours credit**
This course is designed for the student with a very limited background in English composition. It consists of remedial work in both reading and writing to get the student ready for the regular English Composition 12 course. Students are placed in these sections on the basis of entrance tests and high school records. The course is not a part of the regular English composition requirements of six hours and does not exempt a student from either semester of this requirement.

JOURNALISM

- 107 Journalism** **Three hours credit**
A course designed to acquaint students with news reporting in both print and broadcast media, with the major emphasis on newspaper reporting. Students are responsible for all phases of the publication of the college newspaper: reporting, advertising, circulation, etc., with faculty assistance. The class meets three days a week with a combination of laboratory, lecture, and discussion. Outside class work is required because of the nature of the course.

MODERN LANGUAGES

A student with 1 unit credit from high school in a modern foreign language will be allowed 3 hours credit instead of 5 if he enrolls in the elementary course of the same language — with 2 units, zero credit. All other courses carry the maximum credit.

FRENCH

- 1 Elementary French** **Five hours credit**
Oral-aural approach to basic structural patterns of the language and essential grammar. Supplementary reading of textual and periodical material orienting the student to the culture of France and other areas where French is spoken. Five class hours, two laboratory sessions.
- 2 Intermediate French** **Five hours credit**
Continuation of French 1.
- 100 French Composition and Conversation** **Three hours credit**
Review and refinement of structural patterns, practice of idiomatic usage. Cultural and historic background as basic for conversation. Oral and written reports on outside reading of short stories and one-act plays. Three class hours and one laboratory session. **Prerequisite:** Intermediate French 2 or equivalent.
- 101 French Conversation and Reading** **Three hours credit**
Continued oral drill of the structural language patterns and idioms of French. Reading of excerpts and short literary masterpieces providing a basis for conversation. Weekly oral reports on assigned topics. Intensive reading of one contemporary work in full. Three class hours and one laboratory session. **Prerequisite:** French Composition and Conversation 100 or equivalent.

SPANISH

1 Elementary Spanish **Five hours credit**

Oral-aural approach to the basic structural patterns of the language and essential grammar. Supplementary reading of textual and periodical material. Orientation to the Spanish-speaking cultures and their backgrounds. Five class hours and two laboratory sessions.

2 Intermediate Spanish **Five hours credit**

Continuation of Spanish 1.

100 Beginning Spanish Conversation and Composition **Three credit hours**

Development of speaking and writing skills, based on short written conversations and readings from contemporary Spanish short stories. Written reports on outside readings. Three class hours and one laboratory session. **Prerequisite:** Intermediate Spanish 2 or equivalent.

101 Advanced Spanish Conversation and Reading **Three hours credit**

Continued oral drill of the structural language patterns and idioms of Spanish. Reading of short literary works by well-known authors. Assigned topics for reports. One book report (written). Three class hours and one laboratory session. **Prerequisite:** Beginning Spanish Conversation and Composition 100 or equivalent.

PHILOSOPHY

100 Introduction to Philosophy **Three hours credit**

An intimate analysis of the meaning, function, interpretation and scope of philosophy as determined by textual interpretation, collary reading and examples of works of great philosophers. It shows the relationship of philosophy to religion, science, and art.

SPEECH AND THEATRE

12 Voice and Articulation **Three hours credit**

A required course for speech or education majors. Techniques for improving the student's articulation, pronunciation, voice quality. Will include a workable knowledge of phonetics.

13 Public Speaking **Three hours credit**

Study and practice in the planning and delivery of speeches, with emphasis upon clear, effective communication of ideas.

14 Introduction to Theatre **Three hours credit**

A course designed to acquaint students with the contributions which directors, actors, designers, technicians, and playwrights make to modern dramatic productions. Participation in a production as a member of a stage or construction crew or member of a publicity or costume committee, or as a performer is a requirement.

15 Acting **Three hours credit**

Basic principles and techniques of acting and stage movement. Study and practice in make-up.

16 Stagecraft **Three hours credit**

A technical theatre course designed to give the student a practical working knowledge of set design, construction, and painting, along with the technical knowledge necessary to handle the lighting of a show. Business management, costuming, sound, and properties will also be covered.

100 Oral Interpretation of Literature **Three hours credit**

A course in analysis and oral reading of prose, poetry, and drama, planned to meet the needs of prospective teachers of English or Speech or those interested in the theatre. **Prerequisite:** Public Speaking 13 or Voice and Articulation 12.

Department of Physics and Math

Agenstein, Evan R. — Department Head

Huston, Bill L.

Schmitz, Leo

Wilkerson, Jerry M.

MATHEMATICS

PHYSICS

MATHEMATICS

1 Fundamental Concepts of Mathematics Three hours credit

This course gives the student a survey of mathematics from a modern viewpoint. Topics included are: elementary logic and application to proofs; historical development of numerals; bases other than 10; operations and mappings on sets; functions and relations; a brief systematic development of the number system; basic algebra, groups and fields; intuitive geometry; systems of measurement; introduction to statistics.

3 Intermediate Algebra Three hours credit

This course includes quadratic systems, exponents, radicals, ratio, proportion, variation, and the binomial theorem. Open to students who have had one unit of high school algebra or the equivalent.

5 College Algebra Three hours credit

This course begins with a review of topics in previous courses. The further treatment includes quadratic systems, exponents, radicals, ratio, proportion, variation, the binomial theorem, progressions, inequalities, permutations, and combinations. **Prerequisite:** Two units of high school algebra or Intermediate Algebra 3 with a grade of C.

6 Trigonometry Three hours credit

All students attend class three hours a week, but those who have credit for high school trigonometry receive only two hours of credit. **Prerequisite:** Two units of high school algebra, or Intermediate Algebra 3, and one unit of plane geometry.

7 Calculus with Analytic Geometry I Five hours credit

An introduction to plane analytic geometry, differential calculus, and integral calculus. **Prerequisite:** Plane geometry, College Algebra 5 and Trigonometry 6, or the equivalent.

8 Calculus with Analytic Geometry II Five hours credit

A continuation of Calculus 7.

109 Calculus with Analytic Geometry III Five hours credit

Integration, vectors, solid analytic geometry, partial differentiation, multiple integrals, infinite series, and hyperbolic functions.

111 Differential Equations Three hours credit

Ordinary differential equations and applications. **Prerequisite:** Calculus 109.

130 Modern Elementary Mathematics **Five hours credit**

This course presents the modern approach to the study of arithmetic, algebra and geometry. It is designed primarily for elementary education majors. **Prerequisite:** Two units of high school algebra, or Intermediate Algebra 3 with a grade of C.

500 Basic Algebra **Two hours credit**

Available in the evening school program for students who are deficient in algebra. Non-transferable.

PHYSICS

1 Introductory Physics **Five hours credit**

A one-semester course introducing the fundamentals of physics in all areas; mechanic, sound, heat, electricity, magnetism, light and structure of matter. Two hours credit will be allowed students who later register for credit in Physics 111 or Physics 123. Four lectures and two hours of laboratory each week. **Prerequisite:** High school algebra, two years, or Intermediate Algebra 3.

111 Elementary Physics **Five hours credit**

Course covers basic principles and concepts in mechanics, sound, heat, structure of matter, and wave phenomena. Four lectures and three hours of laboratory each week. **Prerequisite:** College Algebra 5 and Trigonometry 6.

112 Elementary Physics **Three hours credit**

Continuation of Physics 111. Course covers electricity, magnetism, light and modern physics. Three lectures and one and one-half hours of laboratory each week. **Prerequisite:** Physics 111.

123 General Physics **Five hours credit**

First half of a year's work in General Physics. Covers mechanics, heat, sound and wave theory. Four lectures and three hours of laboratory each week. **Prerequisite:** Calculus 7.

124 General Physics **Five hours credit**

Second half of a year's work in General Physics. Covers electricity, magnetism, light and modern physics. Four lectures and three hours of laboratory each week. **Prerequisite:** Physics 123.

Department of Social Science

Popplewell, Frank S. — Department Head

Carney, George O.

Harvey, Marian V.

Jordan, James R.

Phelan, Elizabeth J.

Theisen, Lee S.

GEOGRAPHY

HISTORY

POLITICAL SCIENCE

SOCIOLOGY

GEOGRAPHY

1 World Geography Three hours credit

A survey of the geography of the world and the principles underlying geographic development. Special emphasis is placed on earth-sun relationships, weather and climate, formation of landforms, vegetation, and soils. This course is designed to meet the needs of teachers in the elementary grades.

2 Geography of Europe Three hours credit

The nations and regions of Europe west of the U.S.S.R., with present economics as a result of cultural and physical differences in the environment; trends of development as affected by new political and economic factors. **Prerequisite:** A course in geography, European history, or consent of the instructor.

HISTORY

3 Ancient and Medieval Civilization Three hours credit

A survey of the Western World from Antiquity to the 15th century. Attention is directed to the emergence of civilization in the Nile and Tigris-Euphrates valleys, the political, social, economic, and intellectual contributions of Greece, Rome, and Medieval Europe.

4 Modern Civilization Three hours credit

A survey of the Western World from 1500 to 1815. Special attention is given to the dynastic and colonial rivalries of the national states, the Protestant Revolt and Catholic Reformation, emergence of constitutional governments, the scientific and political revolutions of the 17th and 18th centuries.

5 Europe 1815-1870 Three hours credit

A survey of European history from the Congress of Vienna up to the unification movements of Italy and Germany. This course provides the background for the present political, economic, and social structure of the European states. Special attention is given to the period of Reaction and Revolution, 1815-1848; the Nationalistic movements in Italy and Germany; the rise of Socialism-Communism.

6 Europe 1870-1914 Three hours credit

A survey of European history from the Nationalistic movements of Italy and Germany up to World War I. This course provides the background for the present political, economic, and social structure of the European states. Attention is given to the Nationalistic movements in the Balkans; the growth of Nationalism and Materialism; the growth of democracy; the era of intense Imperialism and Colonialism; the diplomatic background of World War I.

7 American History to 1865 Three hours credit

A survey course from the period of discovery to the end of the Civil War. Topics considered are Colonial America, the Revolution, National Development, Sectionalism, and the Civil War.

8 American History Since 1865 Three hours credit

Continuation of American History 7 with emphasis on Reconstruction, Industrialization, Urbanization, the founding of Empire, Progressivism, World War I, the New Deal, World War II, and post-war America.

9 Latin America Three hours credit

A history of Central and South America and the West Indies originally discovered by the Spanish and Portuguese. The Colonial eras, the Latin American revolutions, relationships with the United States and Europe in the modern world.

109 Recent U. S. History Three hours credit

A study in depth of the United States since 1914. **Prerequisite:** American History 7 and 8.

110 Recent European History Three hours credit

The course covers World War I, the rise of dictatorships, the failure of the League, new alignments, and World War II. The background for present world tensions is analyzed. **Prerequisite:** Europe 1870-1914 6 or sophomore standing.

111 The Far East Three hours credit

A survey of East Asia and Pacific from antiquity to the present. Special emphasis on the European traders and missionaries, the founding of the European empires, Oriental resistance to Westernization, emergence of Modern China, Japan, and Pacific nations. **Prerequisite:** Europe 1870-1914 6.

POLITICAL SCIENCE

1 American National Government Three hours credit

A study of the American constitutional system with stress on constitutional development, federal-state-local relations, civil rights, political parties, pressure groups, the Congress, President and the Courts. Some time is given to government finance, regulation of commerce, agriculture, labor, and conservation of natural resources.

2 American State and Local Government Three hours credit

State and local government and its colonial origins. Study of state constitutions, legislatures, governors, courts, state services, functions, and problems in twentieth-century America.

3 International Politics **Three hours credit**

Basically, this course attempts to analyze the goals and processes which determine whether we live in peace or at war. Topics included are the nature of politics at the international level, the national state system, state capabilities, foreign policy objectives, formulation and execution. International organizations, alignments, and contemporary world tensions are evaluated.

104 Comparative Governments **Three hours credit**

The governments of selected European states are compared and contrasted. **Prerequisite:** Three hours of political science.

SOCIOLOGY

1 Introduction to Sociology **Three hours credit**

This course, intended primarily for non-social science majors, considers the factors which determine social organization and behavior. Study is concentrated on the social interaction of individuals and groups. Consideration is given to culture, social classes, population, and institutions.

2 Elementary Sociology **Three hours credit**

Primarily for social science majors, this course stresses basic sociological concepts necessary for further study in this field. Content includes human cultures, groups, social order, population, and social change.

3 Social Institutions **Three hours credit**

This course presents a description and analysis of the structure of human society. Attention is given to social stratification and the familial, religious, and educational institutions. **Prerequisite:** Elementary Sociology 2.

104 Social Deviation **Three hours credit**

This is an introductory course presenting the background and theories of individual and social disorganization. Representative social problems such as delinquency, alcoholism, minority groups, discrimination, and marital conflict are studied. **Prerequisite:** Elementary Sociology 2 and Social Institutions 3.

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