

DESCRIPTIONS of COURSES 1993

This section provides descriptions of all courses given by the University at both the undergraduate and graduate levels.

Refer to the statements on *Credits and Course Formats and Credits* in the *Academic Programs* section of the catalog.

COURSE NUMBERS

001-099 Non-Credit Courses

Courses with these numbers are offered by the University to permit students to make up deficiencies in previous training or to improve their facility in certain basic skills without earning credit.

For information about remedial-developmental-preparatory courses, consult the *Academic Programs* section of the catalog.

100-299 Undergraduate Courses

Courses with these numbers are for undergraduate students. They carry no graduate credit, although graduate students may be admitted to such courses in order to make up prerequisites or to gain a foundation for advanced courses.

For information about remedial-developmental-preparatory courses, consult the *Academic Programs* section of the catalog.

300-499 Advanced Undergraduate Courses

Courses with these numbers are for advanced undergraduate students. They constitute the advanced portion of an undergraduate program leading to the bachelor's degree. A graduate student may carry 400 level courses for credit upon approval of the student's major department or school. In exceptional cases, a graduate student may petition the dean of his or her college, in writing, for approval of a 300 level course for graduate credit.

500-699 Graduate-Professional Courses

Courses with these numbers are courses in the graduate-professional programs. A graduate student may carry these courses for credit with approval of the major department or school.

800-899 Graduate Courses

Courses with these numbers are for graduate students. Advanced undergraduates with Honors College status or a grade-point average in their total programs equal to or greater than the minimum requirements for graduation with honors may be admitted to 800-899 level courses. The student must obtain approval of the relevant department. *More than half of the credits of the total required for a master's degree shall be taken at the 800 and 900 level except as specifically exempted by the dean of the college.*

900-999 Advanced Graduate Courses

Courses with these numbers are exclusively for graduate students and primarily for advanced graduate students. A master's degree student may take these courses with the approval of the major department or school, with the exception of courses numbered 999 (doctoral dissertation research). Admission to a doctoral degree program is a prerequisite of all courses numbered 999.

VARIABLE CREDIT COURSES

For each variable credit course, the range of credits for which a student may enroll in a given semester and the maximum number of credits that a student may earn in a course with a reenrollment provision shall be specified.

MULTITITLED COURSES

A multititled course is one that has been approved as such by the Academic Council upon recommendation of the University Committee on Curriculum (UCC). Approval of a course as a multititled course shall include authorization for subtitles for the course to be established. Approved subtitles shall have the same status as separately approved courses that are included in the *Descriptions of Courses* section of the University catalog. For example, an approved subtitle shall be included in the *Schedule of Courses* in place of the general, authorized title for the multititled course and shall appear on students' academic records (including transcripts). Multititled courses are identified as such by the coding '(MTC)' after the course titles.

Multititled courses may have approved subtitles. A subtitle of a multititled course represents a subject matter area that is related to the course and that has been approved as a subtitle for that course by the UCC.

COURSE LISTINGS

	1	2	3	4
A	405. Biomedical Electronics <i>Fall. 3(3-0) Interdepartmental with Electrical Engineering.</i>			
B	<i>P: MTH 132, PHY 184. R: Open only to juniors and seniors.</i>			
C	Electronic components and circuits. Physiological measurements, transduction of physiological events to electrical signals.			

To understand the characteristics of a course, consider each of the three categories depicted below.

- (A) The course number and title including:
The course number suffix:
H – Honors Course
1 – Type I
2 – Type II
3 – Type III
4 – Type IV
5 – Type V
- Remedial-Develop-
mental-Preparatory
Courses.

For additional information about remedial-developmental-preparatory courses, consult the *Academic Programs* section of the catalog.

The designation code for a Tier II writing course in parentheses following the course title:

(W) – Tier II writing course

For additional information, refer to the Statement on *Writing Requirement* in the *Academic Programs* section of the catalog.

The diversity designation code for an integrative studies course in parentheses following the title:

(I) – international and multicultural diversity

(N) – national diversity

(D) – national diversity, and international and multicultural diversity

For additional information, refer to *Integrative Studies* in the *Academic Programs* section of the catalog.

The designation code for a multititled course:

(MTC) – multititled course.

B The material in italics which includes:

1 The semester(s) the course is authorized to be given.

Lack of staff or low student enrollment may preclude offering the course, particularly at the advanced level, every semester for which it is authorized.

2 The semester credits are designated to include class hours a week as follows: A(B-C) where:

A = Number of semester credits.

B = Number of class hours a week in lecture/recitation/discussion sections.

C = Number of class hours a week in laboratory.

If the credit is indicated to be variable, the number of credits is to be determined at the time of enrollment. If the course is a non-credit course, the credit-equivalent is given in brackets.

3 The course number(s) or other information indicates the preparation or classification prerequisite to enrollment in the course. The course alpha codes and the corresponding names are listed on this page. *The prerequisite may be satisfied by the course or courses indicated or equivalent background.* If class standing listed, only students with the required class standing are eligible for enrollment. A student who is unsure of eligibility for enrolling in a course should contact the department, school, or college that administers the course.

C A brief description of the course.

Course Designations

The names that correspond to the course alpha codes are listed in alphabetical order. Immediately following a name and its corresponding course alpha code, the department or school and/or the college or colleges that have administrative responsibility for the courses identified by that name and alpha code are listed. The academic unit that has the primary administrative responsibility for those courses is listed first; the other units are listed in alphabetical order. The courses are then listed by number, in ascending numerical order.

To assist in locating information about specific courses in the pages which follow, the course alpha codes are listed below in alphabetical order. For each alpha code, the corresponding name is given.

ALPHA CODE	NAME
ACC	Accounting
ADV	Advertising
AE	Agricultural Engineering
AEC	Agricultural Economics
AEE	Agricultural and Extension Education
AFR	African Languages
AL	Arts and Letters
AMS	American Studies
ANP	Anthropology
ANR	Agriculture and Natural Resources
ANS	Animal Science
ANT	Anatomy
ARB	Arabic
AS	Aerospace Studies
ASC	Audiology and Speech Sciences
ASN	Asian Languages
AST	Astronomy and Astrophysics
ATL	American Thought and Language
ATM	Agricultural Technology and Systems Management
BCH	Biochemistry
BCM	Building Construction Management
BIM	Biomechanics
BME	Biomedical Engineering
BOT	Botany and Plant Pathology
BS	Biological Science
CAS	Communication Arts and Sciences
CE	Civil Engineering
CEM	Chemistry
CEP	Counseling, Educational Psychology and Special Education
CHE	Chemical Engineering
CHS	Chinese
CJ	Criminal Justice
CLA	Classical Studies
CMS	Community Health Science
COM	Communication
CPS	Computer Science
CSS	Crop and Soil Sciences
EAD	Educational Administration
EC	Economics
EE	Electrical Engineering
EGR	Engineering
ENE	Environmental Engineering
ENG	English
ENT	Entomology
ES	Earth Science
FCE	Family and Child Ecology
FE	Food Engineering
FI	Finance and Insurance
FM	Family Medicine
FMP	Family Practice
FOR	Forestry
FRN	French
FSC	Food Science
FSM	Food Systems Economics and Management
FW	Fisheries and Wildlife
GBL	General Business and Business Law
GEN	Genetics
GEO	Geography
GLG	Geological Sciences
GRK	Greek
GRM	German
HA	History of Art
HEB	Hebrew
HEC	Human Ecology
HED	Human Environment and Design
HM	Human Medicine
HNF	Human Nutrition and Foods

ALPHA CODE	NAME
HRI	Hotel, Restaurant and Institutional Management
HRT	Horticulture
HST	History
IAH	Integrative Studies in Arts and Humanities
IDC	Interdisciplinary Courses
IM	Internal Medicine
ISB	Integrative Studies in Biological Sciences
ISP	Integrative Studies in Physical Sciences
ISS	Integrative Studies in Social, Behavioral and Economic Sciences
ITL	Italian
JPN	Japanese
JRN	Journalism
LA	Landscape Architecture
LBS	Lyman Briggs School
LCS	Large Animal Clinical Sciences
LIN	Linguistics
LIR	Labor and Industrial Relations
LL	Linguistics and Languages
LTN	Latin
MC	James Madison College
ME	Mechanical Engineering
MED	Medicine
MGT	Management
ML	Marketing and Logistics
MIC	Microbiology
MS	Military Science
MSM	Materials Science and Mechanics
MT	Medical Technology
MTH	Mathematics
MUS	Music
NSC	Natural Science
NUR	Nursing
OGR	Obstetrics, Gynecology, and Reproductive Biology
OM	Osteopathic Medicine
OST	Osteopathic Medicine
PED	Pediatrics

ALPHA CODE	NAME
PES	Physical Education and Exercise Science
PHD	Pediatrics and Human Development
PHL	Philosophy
PHM	Pharmacology and Toxicology
PHY	Physics
PKG	Packaging
PLS	Political Science
PRM	Public Resource Management
PRR	Park and Recreation Resources
PRT	Portuguese
PSC	Psychiatry
PSL	Physiology
PSY	Psychology
PTH	Pathology
RAD	Radiology
RD	Resource Development
REL	Religious Studies
ROM	Romance Languages
RUS	Russian
SCS	Small Animal Clinical Sciences
SOC	Sociology
SPN	Spanish
SSC	Social Science
STA	Studio Art
STT	Statistics and Probability
SUR	Surgery
SW	Social Work
SYS	Systems Science
TC	Telecommunication
TCC	Transcollegiate Courses
TE	Teacher Education
THR	Theatre
UP	Urban Planning
VM	Veterinary Medicine
WS	Women's Studies
ZOL	Zoology