

# DESCRIPTIONS of COURSES 1979

This section provides descriptions of all courses given by the University at both the undergraduate and graduate levels. The courses are listed in the schools and departments which give the instruction. The schools and departments are arranged in alphabetical sequence.

## 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.

## 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.

#### 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 and the department offering the course. 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 graduateprofessional programs. A graduate student may carry these courses for credit with approval of the major department.

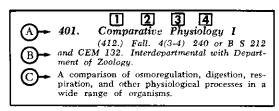
## 800-899 Graduate Courses

Courses with these numbers are for graduate students. Advanced undergraduates with a 3.00 or better gradepoint average in their total programs may be admitted to 800-899 level courses; others, if recommended by their academic adviser and approved by their dean. At least 23 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 candidate may take these courses with the approval of the major department.

# **COURSE LISTINGS**



This material has three categories,

(A) The course number and title.

B The material in italics which includes:

**1** The former course number in parentheses if the course number has been changed within the past 5 years.

2 The term or terms 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 term for which it is authorized.

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

- A = Number of term (quarter) credits.
- B = Number of class hours a week in lecture, recitation, quiz, etc., 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.

4 The course number(s) or other information indicate the preparation or classification prerequisite to enrollment in the course. If no department code is listed, the course number refers to the course within the same department. If a department code and course number are listed, the reference is to a course in the department indicated by the code. The department codes and the corresponding department names are listed on this page. The prerequisite may be satisfied by the course or courses indicated or equivalent background. If a class standing such as juniors is listed, only students with that or higher class level are eligible for enrollment. The school or department office should be consulted in cases of question as to eligibility for taking the course.

C A brief description of the course.

#### Department Codes Used in Course Prerequisites

Codes are listed in alphabetical order by the code. The departments are listed in alphabetical sequence by their names in the pages which follow.

DEPT.	DEPARTMENT
CODE	NAME
ADV	Advertising
ΑE	Agricultural Engineering
AET	Agricultural Engineering Technology
AEC	Agricultural Economics
AFA	Accounting and Financial Administration
AFR	African Languages–See Linguistics and
	Oriental and African Languages
AG	Agriculture
АН	Animal Husbandry
A L	Arts and Letters
AMS	American Studies
ANP	Anthropology

DEPT.	DEPARTMENT
CODE	NAME
ANS	Animal Science
ANT	Anatomy
ART A S	Art-See History of Art and Studio Art
ASC	Aerospace Studies Audiology and Speech Sciences
AST	Astronomy and Astrophysics
ATL	American Thought and Language
вС	Building Construction-See Agricultural
	Engineering
BCH	Biochemistry
BIM	Biomechanics
BME BOA	Biomedical Engineering
BOT	Business Law and Office Administration Botany and Plant Pathology
BPY	Biophysics
BS	Biological Sciences
CAS	Communication Arts and Sciences (College of)
C E	Civil Engineering
CEM	Chemistry
CHE	Chemical Engineering
CHS	Chinese-See Linguistics and Oriental and
CLA	African Languages
CMS	Classical Studies Community Health Science
COM	Communication
CPS	Computer Science
СЈ	Criminal Justice
CSS	Crop and Soil Sciences
DRY	Dairy Science
EC ED	Economics Education
ΕE	Electrical Engineering
EGR	Engineering
ENG	English
ENT	Entomology
ΕS	Earth Science-See Geology
FCS	Family and Child Sciences
FΕ	Family Ecology
F M	Family Medicine
FMP FOR	Family Practice Forestry
FRN	French–See Romance and Classical Languages
FSC	Food Science
FSM	Food Systems Economics and Management
F W	Fisheries and Wildlife
GEN	Genetics
GEO	Geography
GLG	Geology Cerman and Russian
G R GEK	Greek–See Romance and Classical Languages
GRM	German–See German and Russian
H A	History of Art-See Art
НD	Human Development
HEC	Human Ecology (College of)
HED	Human Environment and Design
HM	Human Medicine (College of)
HNF	Human Nutrition and Foods Health, Physical Education and Recreation
HPR HRI	Hotel, Restaurant and Institutional Management
HRT	Horticulture
HST	History
HUM	Humanities
IDC	Interdisciplinary Courses
IS	Improvement Service
ITL	Italian-See Romance and Classical Languages
JAP	Japanese–See Linguistics and Oriental and
JMC	African Languages Justin Morrill College
JRN	Journalism
LA	Landscape Architecture—See Urban Planning

and Landscape Architecture

DEPT.	DEPARTMENT	DEPT.	DEPARTMENT
CODE	NAME	CODE	NAME
LBC	Lyman Briggs College	ΡS	Poultry Science
LIN	Linguistics–See Linguistics and Oriental and	PSC	Psychiatry
	African Languages	PSL	Physiology
LIR	Labor and Industrial Relations	PSY	Psychology
LOA	Linguistics and Oriental and African Languages	PTH	Pathology
LSM	Large Animal Surgery and Medicine	RAD	Radiology
LTN	Latin-See Romance and Classical Languages	R D	Resource Development
МС	James Madison College	$\mathbf{REL}$	Religious Studies
ΜЕ	Mechanical Engineering	RES	Racial and Ethnic Studies
MED	Medicine	ROM	Romance and Classical Languages
MGT	Management	RUS	Russian–See German and Russian
MMM	Metallurgy, Mechanics and Materials Science	SAL	South Asian Languages—See Linguistics and
MPH	Microbiology and Public Health		Oriental and African Languages
MS	Military Science	SΕ	Sanitary Engineering—See Civil and Sanitary
МΤ	Medical Technology		Engineering
MTA	Marketing and Transportation Administration	SOC	Sociology
MTH	Mathematics	SPN	Spanish–See Romance and Classical Languages
MUS	Music	SS	Social Science
ΝE	Nursing	SSC	Social Science (College of)
NR	Natural Resources	SSM	Small Animal Surgery and Medicine
N S	Natural Science	STA	Studio Art–See Art
NSC	Natural Science (College of)	STT	Statistics and Probability
OGR	Obstetrics, Gynecology and Reproductive	SW	Social Work
	Biology	SUR	Surgery
ОМ	Osteopathic Medicine	SYS	Systems Science–See Electrical Engineering
OST	Osteopathic Medicine (College of)		and Systems Science
PAM	Public Affairs Management	THR	Theatre
$\mathbf{PHL}$	Philosophy	TC	Telecommunication
PHM	Pharmacology and Toxicology	ŪC	University College
PHS	Physical Science	UD	
PHY	Physics		Urban Development (College of)
PKG	Packaging	UMS	Urban and Metropolitan Studies
PLS	Political Science	UP	Urban Planning
PRR	Park and Recreation Resources	VM	Veterinary Medicine (College of)
PRT	Portuguese—See Romance and Classical Languages	ZOL	Zoology