

# DESCRIPTIONS of COURSES 1972 

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 his major department and the department offering the course. In exceptional cases, a graduate student may petition the dean of his 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 his 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 his major department.


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 for the course with the classroom and laboratory hours respectively within the parentheses. Special information relative to the course credit is included. 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 creditequivalent 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. <br> CODE | department <br> name |
| :---: | :---: |
| ADV | Advertising |
| A E | Agricultural Engineering |
| AEC | Agricultural Economics |
| AFA | Accounting, and Financial Administration |
| AFR | African Languages-See Linguistics and Oriental and African Languages |
| AG | Agriculture |
| A H | Animal Husbandry |
| A. $L$ | Arts and Letters |
| AMS | American Studies |
| ANP | Anthropology |
| ANS | Animal Science |
| ANT | Anatomy |
| ART | Art-See History of Art and Studio Art |
| A S | Aerospace Studies |
| ASC | Audiology and Speech Science |
| AST | Astronomy |
| ATL | American Thought and Language |
| B C | Building Construction-See Packaging |
| BCH | Biochemistry |
| BOA | Business Law and Office Administration |
| BOT | Botany and Plant Pathology |
| BPY | Biophysics |
| B S | Biological Science |
| $\bigcirc \mathrm{C}$ | Civil Engineering |
| SEM | Chemistry |
| CHE | Chemical Engineering |
| CHS | Chinese-See Linguistics and Oriental and African Languages |
| CLA | Classical Studies |
| COM | Communication |
| CPS | Computer Science |


| DEPT, CODE | DEPARTMENT <br> NAME |
| :---: | :---: |
| C J | Criminal Justice |
| CSC | Crop Science |
| DRY | Dairy Science |
| EC | Economics |
| ED | Education |
| E E | Electrical Engineering |
| EGR | Engineering |
| ENG | English |
| ENT | Entomology |
| EPD | Extension Personnel Development |
| E S | Earth Science |
| FCS | Family and Child Sciences |
| F E | Family Ecology |
| FOR | Forestry |
| FRN | French--See Romance Languages |
| FSC | Food Science |
| FSM | Food Systems Economics and Management |
| F W | Fisheries and Wildlife |
| GEO | Geography |
| GLG | Geology |
| G R | German and Russian |
| GRK | Greck-See Romance Languages |
| GRM | German-See German and Russian |
| H A | History of Axt-See Art |
| H D | Human Development |
| HED | Human Environment and Design |
| H M | Human Medicine (College of) |
| HNF | Human Nutrition and Foods |
| HPR | Health, Physical Education and Recreation |
| HRI | Hotel, Restaurant and Institutional Management |
| HRT | Horticulture |
| HST | History |
| HUM | Humanities |
| IDC | Interdisciplinary Courses |
| I S | Improvement Services |
| ITL | Italian-See Romance Languages |
| JAP | Japanese-See Linguistics and Oriental and African Languages |
| JMC | Justin Morrill College |
| JRN | Journalism |
| L A | Landscape Architecture--See Urban Planning and Landscape Architecture |
| LAR | Laboratory Animal Resources |
| LBC | Lyman Briggs College |
| IJIN | Linguistics-See Linguistics and Oriental and African Languages |
| LIR | Labor and Industrial Felations |
| LOA | Linguistics and Oriental and African Languages |
| L.SM | Large Animal Surgery and Mcdicine |
| LTN | Latin-Sce Romance Languages |
| M C | James Madison College |
| M E | Mechanical Eugineering |
| MED | Medicine |
| MGT | Management |
| MMM | Metallurgy, Mechanics and Materials Science |
| MPFI | Microbiology and Public Health |
| M S | Military Science |
| MT | Medical Technology |
| MTA | Marketing and Trausportation Administration |
| MTH | Mathematics |
| MUS | Music |
| N E | Nursing |
| N S | Natural Science |
| NSC | Natural Science (College of) |
| PAM | Public Affairs Maragement |
| PHL | Philosophy |
| PHM | Pharmacology |
| PHS | Physical Science |
| PHY | Physics |
| PKG | Packaging |
| PLS | Political Science |
| PRR | Park and Recreation Resources |
| PRT | Portuguese--See Romance Languages |
| $P$ S | Poultry Science |
| PSC | Psychiatry |
| PSI, | Physiology |
| PSY | Psychology |
| PTH | Pathology |
| R D | Resource Development |
| REL | Religion |
| ROM | Fomance Languages |
| RUS | Russian-See Gerran and Russian |
| SAL | South Asian Languages-See Linguisties and Oriental and African Languages |
| S E | Sanitary Engineering--See Civil and Sanitary Engineering |
| SLS | Soil Science |
| SOC | Sociology |
| SPN | Spanish-See Romance Languages |
| S S | Social Science |
| SSC | Social Science (College of) |
| SSM | Small Arimal Surgery and Medicine |
| STA | Studio Art-Sec Art |
| $\mathrm{STT}_{\mathrm{S}} \mathrm{W}$ | Statistios and Probability |
| S W | Social Work |
| SYS | Systems Science-Sce Electrical Engineering and Systems Science |
| THR | Theatre |
| T R | Television and Radio |
| U C | University College |
| U ${ }_{\text {U }}$ | Urban Planning Zoology |

