171H. Honors Natural Science
(192H.) Fall. 4(2-3)
Exploration of various topics of interest and value to students eligible for Honors, especially the nature and significance of science in western culture and its interrelationships with other creative activities.

172H. Honors Natural Science
(193H.) Winter. 4(2-3) 171H.
A continuation of 171H.

173H. Honors Natural Science
(191H.) Spring. 4(2-3) 172H.
Continuation of 172H.

181. Natural Science
Approval of department.

182. Natural Science
Winter. 4(2-3) 181 or approval of department.

183. Natural Science
Spring. 4(2-3) 182 or approval of department.

190. Technology and Society
Winter. 3(3-0) One term of American Thought and Language. Interdepartmental with and administered by the Engineering Department. An attempt to describe and analyze portions of current technology and its desired and undesired consequences; and exploration of avenues for assessing such consequences for future technologies.

200. Supervised Individual Study
Fall, Winter, Spring, Summer. 2 to 4 credits. May re-enroll for a maximum of 12 credits. Approval of department. Selected students requesting individual study of interdisciplinary problems will work under supervision of University College professors. Variable elective credit will be determined when the student secures instructor, adviser, and department approval.

321. Studies in Natural Science I
Fall. 4(2-3) Juniors.
An interdisciplinary analysis of the nature of science and its role in the human experience, with emphasis on science as a way of knowing. Subject matter used includes material from the physical sciences.

322. Studies in Natural Science II
Winter. 4(2-3) Juniors.
An interdisciplinary study of the nature of science and its role in the human experience, with emphasis on the way science affects society and is, in turn, affected by society. Subject matter used includes material from the biological sciences.

323. Studies in Natural Science III
Spring. 4(3-3) Juniors.
An interdisciplinary approach to the nature of science and its role in the human experience, with emphasis on man and his understanding of the world around him. Subject matter used includes material from the historical sciences.

401. Technology Assessment
Spring. 3(3-0) Seniors, or approval of department. Interdepartmental with and administered by the Engineering Department. Sociotechnical evaluation of proposed technologies on economic, political, and cultural aspects of society. Identification of technical strategies and social goals. Techniques of assessment.

NATURAL SCIENCE NSC
(COLLEGE OF)

230. The Role of the Natural Sciences in Future Environments
Fall. 4(4-0) Approval of college. Interdepartmental with the departments of Entomology, Geology, Physics, and Zoology. Physical and biological science concepts relevant to understanding of environmental issues. Options for action in areas of population size, energy, and life support system. Illustrated by case studies.

390H. The Human Organism
Winter. 3(3-0) Juniors; approval of the Honors College. The importance of discoveries in biology for our understanding of the human organism with emphasis from the fields of genetics, molecular biology, behavior, developmental biology, physiology and ecology.

391H. Man's Universe
Fall. 3(3-0) Juniors; approval of the Honors College. A creative review by senior faculty from astronomy, biochemistry, biophysics, geology, physics, and philosophy of the impact of recent space probes in developing modern concepts of the universe, the origin of the earth and life upon it.

400. Nature and Uses of Electron Microscopes
Fall. 3(2-1) MTH 111, Juniors, 1 year college physics.
Principles of electron optics including history, construction, and design of electron optical equipment. Lectures and demonstrations will be given on uses of various types of electron microscopy in representative biological and physical sciences.

435. Pest Management I: Pesticide Chemistry and Application Systems for Plant Protection
Fall. 5(2-3) 138. Interdepartmental with Agriculture and Natural Resources. A broad overview of pesticide chemistry, efficient usage, environmental fate, legislation and application techniques.

NURSING NE

College of Natural Science

205. Foundations of Nursing
Fall. 3(2-2) Approval of school. Introduction to principles basic in identifying nursing problems and their use in sound planning of patient care.
206. Foundations of Nursing
Fall. 4(2-3) 205.
Fundamental principles are presented as they relate to the care of the whole person; identification of problems confronting the individual in illness, methods of approach to the patient as a person whereby joint effort may contribute to improved well-being and/or recovery.

207. Foundations of Nursing
Spring. 4(2-6) 206.
Continues building on concepts, using principles and knowledge introduced in the foregoing courses. The laboratory now moves into the clinical area where practice in the nursing of patients becomes the focus of application of past learning and study.

303. Medical and Surgical Nursing
Fall, Spring. 12 credits. 207.
Care of individuals receiving medical and surgical therapy with emphasis on integration of preventative, emotional and social aspects of illness, pathological relationships, and all forms of therapy and rehabilitation as they relate to medical and surgical nursing. Instruction and guided practice.

304. Medical and Surgical Specialties
Winter, Summer. 12 credits. 303. Continuation of 303.

305. Maternity Nursing
Fall, Winter, Spring, Summer. 12 credits. 305A. Application of School.
Nursing through pregnancy, parturition, and postpartum, including care of the new born. Instruction and guided practice.

306. Nursing of Children
Fall, Winter, Spring, Summer. 12 credits. 207; FCS 252B.
Normal growth and development from infancy through adolescence, care and health supervision of well children, treatment and rehabilitation of sick and handicapped children. Instruction and guided practice.

400H. Honors Work
Fall, Winter, Spring, Summer. 1 to 12 credits. Approval of school.

402A. Psychiatric Nursing of Individuals
(402.) Fall, Winter, Spring. 6 credits. 402A Concurrently.
Provides opportunities to develop skill in utilizing concepts, principles and dynamics of group and community interactions relevant to providing nursing intervention in programs for primary, secondary and tertiary prevention in community mental health.

402B. Group Process and Community Action in Psychiatric Nursing
(402.) Fall, Winter, Spring. 6 credits. 402A Concurrently.
Provides opportunities to develop skill in utilizing concepts, principles and dynamics of group and community interactions relevant to providing nursing intervention in programs for primary, secondary and tertiary prevention in community mental health.

402A. Introduction to Public Health
Fall, Winter, Spring. 4(4-0) Majors or approval of school.
Philosophy, development, organization, and responsibilities of public health are explored in the light of the current economic and political climate. An introduction to vital statistics, epidemiology, and environmental health is included. Provides a frame of reference for practice in this field.

403B. Public Health Nursing
Fall, Winter, Spring. 8(4-16) Seniors.
Relationships between public health nursing and other health and welfare services. Guided practice is provided for students working with individuals, families and community resources. Major focus is on health maintenance, health promotion and nursing care to the sick in their homes. Roles, responsibilities and functions of the nurse in the community are stressed.

404. Survey of Nursing
Fall, Winter, Spring. 4 credits. Seniors.
Development of nursing to present status, current problems and long-term goals. Fields of service open to graduate nurses; nursing organizations, national, state and local, their services and objectives.

406. Nursing Leadership and Management
Fall, Winter, Spring. 8(4-16) Senior majors.
Three areas of emphasis are leadership, management and problem-solving within health care work groups. Clinical experience throughout the term is continuous within upper group. Clinical laboratory in community hospitals and agencies.

490. Special Problems in Nursing
Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 12 credits. Approval of department. Exploration of certain areas in nursing in greater depth and/or from a different perspective than possible within the limits of required courses.

OBSTETRICS, GYNECOLOGY AND REPRODUCTIVE BIOLOGY

College of Human Medicine

605. Obstetrics/Gynecology Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll for a maximum of 41 credits. H M 909.
Experience with gynecologic and obstetrical patients, in in-patient and out-patient settings, under the direction of community practitioners and residents of the MSU faculty.

OSTEOPATHIC MEDICINE* O M

College of Osteopathic Medicine

501. Medical Biology I
Fall. 4(4-0)
Integrated aspects of biology providing a foundation and vocabulary preparatory to studies in osteopathic medicine.

502. Medical Biology II
Winter. 3 to 8 credits. Admission to a college of medicine. Continuation of 501 emphasizing pathology and pharmacology.

*Established July 1, 1971.

OSTEOPATHIC MEDICINE OST (COLLEGE OF)

551. Systems Biology I
(O M 550.) Spring. 3 to 12 credits. Admission to a professional medical program. A multidisciplinary approach to the hematopoietic systems providing a functional integration of basic science and clinical information.