

437. Pest Management III: Systems Management for Plant Protection
Spring. 4(3-2) 435 and 436, FSM 200 or EC 201. Interdepartmental with Agriculture and Natural Resources.

Designed to integrate knowledge and improve ability in arriving at pest management decisions of varying complexity involving the fields of agronomy, wildlife, horticulture, entomology, and plant pathology.

471. Environmental Topics in Nonmetropolitan Regions

Fall. 4(4-0) Nomination of students by own department and approved by participating faculty. Interdepartmental with Natural Resources and Agriculture and administered by Natural Resources.

Environmental topics in nonmetropolitan regions including issues on: production agriculture, service industries, nonagricultural uses, rural urban balance, discussion topics and case studies.

801. Special Problems in Electron Microscopy

Fall, Winter, Spring, Summer. 1 to 15 credits. Approval of instructor.

810. Methods in Transmission Electron Microscopy

Winter, Spring. 3(1-5) 400 or approval of instructor.

Use of the transmission electron microscopes and preparative instruments. Preparative technique for biological and nonbiological materials. Photographic principles including interpretation of micrographs.

820. Methods in Scanning Electron Microscopy

Winter, Spring. 3(1-5) 400 or approval of instructor.

Use of the scanning electron microscope and preparative equipment. Preparative technique for biological and nonbiological materials. Interpretation of micrographs.

830. Analytical Electron Microscopy

Fall. 2(1-3) 810 or 820 or approval of instructor.

Use of X-ray analysis on electron microscopes and electron microprobes with biological and physical materials. Methods of preparation and analysis of product data.

207. Foundations of Nursing

Spring. 4(2-6) 206.

Continues building on concepts, using principles and knowledge introduced in the foregoing nursing 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. Approval of school.

Nursing through pregnancy, parturition, and puerperium, including care of the new born. Instruction and guided practice.

306. Nursing of Children

Fall, Winter, Spring, Summer. 12 credits. 207; FCS 262B.

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. Seniors, 402B concurrently.

Provides opportunities to develop skill in utilizing concepts and principles relevant to creating and maintaining therapeutic interpersonal relationships; individual and group participation with other professionals in providing comprehensive mental health services to the mentally ill individual and his family.

402B. Group Process and Community Action in Psychiatric Nursing

(402.) Fall, Winter, Spring. 6 credits. Seniors. 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.

403A. 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.

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 one work group. Clinical laboratory in community hospitals and agencies.

407. Introduction to Nursing Research

Fall, Winter, Spring. 2(2-0) Seniors in School of Nursing.

Critical reading and critique of nursing research literature; define research terminology and procedures and apply to clinical nursing through discussion and writing.

408. Nursing Issues and Trends

(404.) Fall, Winter, Spring. 2(2-0)

Seniors.

Covers current issues; past, present and future trends in nursing through lectures, seminars, group discussions, special projects.

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.

550. Interdisciplinary Health Care Seminar I

Winter. 2(2-0) Approval of school.

Discusses issues, problems and theories related to interdisciplinary cooperation, collaboration, conflict and negotiation. Analysis of situations in practice will be a part of course. Focus on nurse's role and relationships in interdisciplinary provided system.

551. Interdisciplinary Health Care Seminar II

Spring. 2(2-0) Approval of school.

Application of methods of using health care evaluation to bring about changes in health care practice. Concepts of change and evaluation will be an important component. Students will design a plan of change based on evaluation from clinic practice.

552. Interdisciplinary Health Care Seminar III

Summer. 2(2-0) Approval of school.

Application of analysis of the organizational components of family practice. Identification of components of third-party payer activities, data and information systems, and analysis of classification systems, as well as patient management protocols will be included.

560. Ambulatory Nursing Seminar I

Fall. 3(3-0) Approval of school.

Introductory principles of care in family practice setting. Assists nurse in beginning to identify and develop own specialty role in setting with focus on wellness and prevention of illness.

561. Ambulatory Nursing Seminar II

Winter. 3(3-0) 560.

Implications of illness on cognitive, psychosocial, cultural, emotional status of family. Importance of nursing role in family care is stressed. Beginning discussion of caseload determination, compliance and evaluation of care.

NURSING

NE

College of Natural Science

205. Foundations of Nursing

Fall. 3(2-3) Approval of school.

Introduction to principles basic in identifying nursing problems and their use in sound planning of patient care.

206. Foundations of Nursing

Winter. 4(3-3) 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.

**Descriptions — Nursing
of
Courses**

562. Ambulatory Nursing Seminar III
Spring. 3(3-0) 561.

Nursing intervention and caseload management techniques. Development of referral to and utilization of other professionals, community agencies, secondary services. Emphasis on compliance and evaluation, interdisciplinary relationships.

563. Ambulatory Nursing Seminar IV
Summer. 3(3-0) 562.

Theory and research development and application in ambulatory care. Patient education, change mechanisms, role identification and financial implications of clinical nursing in various ambulatory settings. Goal setting for complex problems and evaluation.

570. Research Methods for Nursing

Winter. 3(3-0) Statistics course and approval of school.

Identification of researchable clinical nursing problems, selection of appropriate methodology, tools, responsibility of the nurse clinician, use of results in clinical practice. Issues, problems and process of theory development, analysis of present state of theory development.

580. Nursing Clinician Practicum I

Fall. 3(1-2) Approval of school.

Beginning skill development in physical assessment, interviewing, history taking and health assessment of adult and child. Limited clinical experience with selected patients. Concurrent with and related to 560.

581. Nursing Clinician Practicum II

Winter. 3(1-2) 580.

More detailed family nurse clinician assessment of complex patients stressed. Integration of assessment data into therapeutic plan with beginning emphasis on education, compliance and evaluation. Joint planning done with other team members.

582. Nursing Clinician Practicum III

Spring. 4(1-3) 581.

Comprehensive management of complex patient caseload. Development of referral patterns, interdisciplinary functioning. Major focus on compliance and evaluation of care and peers. Identification of research and theory related to ambulatory care.

583. Nursing Clinician Practicum IV

Summer. 4(1-3) 582.

Comprehensive management of complex patient caseload. Identification and application of research and theory related to ambulatory care. Goal setting and evaluation of effectiveness of therapeutic plan. Delivery of care in variety of ambulatory settings.

590. Special Problems in Nursing

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 12 credits. Approval of school.

Allows exploration of certain areas and issues in nursing in greater depth and/or from different perspective than possible within limits of required courses.

595. Special Topics in Nursing

Fall, Winter, Spring. 2 to 6 credits. May re-enroll for a maximum of 6 credits. Approval of school.

Allows exploration of unique issues in nursing and/or one health care system. Topics to be selected from current issues but not repeated more than once.

599. Research for Thesis

Fall, Winter, Spring. 1 to 3 credits. May re-enroll for a maximum of 10 credits. Approval of school.

Thesis for completion of the master's degree in nursing. Must have a clinical orientation and must relate directly to the patient's disease process or the delivery of ambulatory care to the patient as it affects the management of the disease process. The research process must apply to nursing and solution of nursing problems and include the development of a theoretical rationale for selection of appropriate methodology.

**OBSTETRICS, GYNECOLOGY
AND REPRODUCTIVE
BIOLOGY OGR**

College of Human Medicine

608. Obstetrics/Gynecology Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll for a maximum of 43 credits. H M 602.

Experience with gynecologic and obstetrical patients, in in-patient and out-patient settings, under the direction of community practitioners and members 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.

530. Clinical Science I

Fall. 2(1-3) Admission to a college of medicine.

Fundamental concepts and skills essential to the performance of a clinical history and physical examination.

531. Clinical Science II

Winter. 2(2-0)

Techniques, concepts and skills required for competent history taking and physical examination utilizing lectures, laboratory and films for instructional purposes.

532. Clinical Science III

Spring. 1(0-3) Admission to a college of medicine

A clinical study program providing an opportunity to learn the skills of history taking and physical examination by actual performance of the involved techniques on patients under physician supervision.

*Established July 1, 1971.

533. Clinical Science IV

Summer. 1(0-3) Admission to a college of medicine.

Continuation of 532.

534. Clinical Science V

Fall. 1(0-3) Admission to a college of medicine.

A clinic-based program providing additional emphasis on history taking and physical examination as well as developing fundamental abilities in diagnosis and problem solving in the clinic setting.

535. Clinical Science VI

Winter. 1(0-3) Admission to a college of medicine.

A continuation of 534.

536. Clinical Science VII

Spring. 1(0-3) Admission to a college of medicine.

Continuation of 535.

537. Clinical Science VIII

Summer. 1(0-3) Admission to a college of medicine.

Continuation of 536.

600. Clinical Science Practicum

Fall, Winter, Spring, Summer. 15 credits. May re-enroll for a maximum of 60 credits.

A clinic oriented course covering the major areas of medical practice including involvement in Family Practice and Community Health Services.

620. Directed Studies

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 24 credits. Approval of department.

Individual or group work on special problems in medicine.

**OSTEOPATHIC MEDICINE OST
(COLLEGE OF)**

**500. Historical and Biological
Foundations of Osteopathic
Medicine**

Summer. 2(3-0) Admission to a professional medical program.

Historical development of the osteopathic profession. Integration of biological and osteopathic principles in the consideration of health and disease.

**520. Normal Endocrine Structure and
Function**

Spring. 2(2-0) Admission to the professional program in a college of medicine.

An integrated basic science course presenting a series of lectures and laboratories related to the normal structure and function of the endocrine organs. Prerequisite for studying endocrine diseases in systems biology.

551. Systems Biology I

(OM 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.