

444. Pest Management I: Systems Management for Plant Protection

(437.) Fall. 4(3-2) 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.

445. Pest Management II: Pesticide Chemistry and Application Systems for Plant Protection

(435.) Winter. 5(3-4) CEM 132. Inter-

departmental with Agriculture and Natural Resources.

A broad overview of pesticide chemistry, efficient usage, environmental fate, legislation and application techniques.

446. Pest Management III: Biological Systems for Plant Protection

(436.) Spring. 3(3-0) ENT 430, BOT 405,

HRT 402 or CSS 402. Interdepartmental with Agriculture and Natural Resources.

Management of plant pests utilizing host resistance, cultural practices, legislation, and biological systems.

460. Clinic in Natural Science Teaching

Fall, Winter, Spring, Summer. 1 credit.

May reenroll for a maximum of 6 credits. Bachelor's degree.

Each practicum will deal with a specific science or science related problem and its implications for instruction. Discussions are intended to have immediate application by participants.

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) NSC 400 or ap-

proval 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) NSC 400 or ap-

proval 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) NSC 810 or NSC 820 or ap-

proval 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.

NURSING

N E

College of Natural Science

200. Nursing I

Spring. 4(4-0) Admission to School of Nursing.

Concepts and theories of nursing, science and Man in relation to professional nursing practice. Role of nursing in contemporary society.

300. Nursing II

Fall, Summer. 10(7-9) N E 200.

Independent nursing role. The well individual. Holistic approach to Man. Impact of developmental levels upon client health. Application of nursing process in maintaining wellness.

301. Nursing III

Fall, Winter. 10(6-12) N E 300.

Independent nursing role. Application of nursing process in a variety of health care settings. Healthy clients adapting to stress at all stages in the life cycle.

302. Nursing IV

Winter, Spring. 10(5-15) N E 301, N E

441.

Promotion of adaptation of individuals in diminished-stable health states and families in stable health states. Relates research findings to practice.

303. Medical and Surgical Nursing

Fall, Spring. 12 credits. N E 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 Specialities

Winter, Summer. 12 credits. N E 303.

Continuation of N E 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. N E 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.

400. Nursing V

Fall, Spring. 10(5-15) N E 302.

Individuals in diminished-unstable health states and families in stable health states. Community assessment skills. Interdisciplinary approach to health care systems. Relates research findings to practice.

400H. Honors Work

Fall, Winter, Spring, Summer. 1 to 12 credits. Approval of school.

401. Nursing VI

Winter, Summer. 10(4-18) N E 400.

Individuals in compensated-decompensated health states, families in diminished-unstable health states, and communities in optimal health states. Functions interdependently within health care teams. Applies research findings to practice.

402A. Psychiatric Nursing of Individuals

Fall, Winter, Spring. 6 credits. Seniors, N E 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

Fall, Winter, Spring. 6 credits. Seniors. N E 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.

405. Nursing VII

Fall, Spring. 10(3-21) N E 401.

Integration of nursing, biological and behavioral sciences stressing application of the nursing process to the care of individuals, families and communities in depleted health states. Applies research findings to practice.

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.

**Descriptions – Nursing
of
Courses**

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.

440. Clinical Problems in Adaptation I
Fall, Summer. 5(5-0) PSL 241 and approval of school.
Homeostasis; range of physiological alterations to stress. Man's adaptive-maladaptive responses.

441. Clinical Problems in Adaptation II
Fall, Winter. 5(5-0) N E 440 and approval of school.
Continuation of N E 440.

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

495. Selected Topics in Nursing
Fall, Winter, Spring. 2 to 6 credits. May reenroll for a maximum of 6 credits if different topic is taken. Approval of school.
Allows exploration of unique issues in nursing. Topics to be selected from current issues.

550. Interdisciplinary Health Care Seminar I
Fall. 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) N E 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.

562. Ambulatory Nursing Seminar III
Spring. 3(3-0) Approval of school.
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) Approval of school.
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. 5(1-12) N E 560 or concurrently, 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.

581. Nursing Clinician Practicum II
Winter. 4(1-9) N E 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(1-9) N E 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(1-9) N E 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 reenroll 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 reenroll 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 reenroll 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

533. Introduction to Obstetrics and Gynecology
Winter. 1(1-0) Admission to a college of medicine or approval of department; H M 514 concurrently.
Normal physiology and endocrinology of menstrual cycle, conception, pregnancy, and labor. Diagnosis of high risk pregnancy.

608. Obstetrics/Gynecology Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll 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.

609. Obstetrics and Gynecology Advanced Clerkship
Fall, Winter, Spring, Summer. 4 to 16 credits. May reenroll for a maximum of 16 credits. OGR 608, approval of department and approval of community coordinator.
Advanced clinical experience in gynecology and/or obstetrics.

610. Gynecology Ambulatory Clinic
Fall, Winter, Spring, Summer. 4 to 16 credits. May reenroll for a maximum of 16 credits. H M 602.
Contraception, management of abnormal Pap smear, pregnancy and abortion counseling, and general office gynecology.

611. Case Studies in Obstetrics and Gynecology
Fall, Winter, Spring, Summer. 8 to 16 credits. May reenroll for a maximum of 16 credits. H M 602.
The student will design, pretest and field test a simulation of a clinical problem in obstetrics and gynecology.

OSTEOPATHIC MEDICINE O M

College of Osteopathic Medicine

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.