493 **Music Therapy: Clinical Practicum**

Fall, Spring, Summer. 1 credit. Fall: Offered at various a. Spring: sites around the U.S. P:M: (MUS 471) R: Open only to Music Therapy majors.

Six months of internship in an approved music therapy clinical program at an accredited treatment center.

Student Teaching in Music

Fall, Spring. 9 credits. Interdepartmental with Teacher Education. R: Open only to seniors in the Bachelor of Music Education maior

Supervised music teaching experience in schools. On-campus seminar required.

NATURAL SCIENCE

NSC

College of Natural Science

101 **Preview of Science**

Fall. 1 credit. Interdepartmental with Agriculture and Natural Resources; Engineering; Social Science. R: Approval of college.

Overview of natural sciences. Transitional problems. Communications and computer skills. Problemsolving skills. Diversity and ethics problems in science. Science and society.

Preprofessional Freshman Seminar

Fall, Spring. 1(1-0)

Overview of human health care professions with emphasis on academic and nonacademic undergraduate preparation, campus resources, communication and computer skills, and collaborative learn-

150 **Preview of Biomedical Research**

Spring. 1(1-0) Interdepartmental with Medical Technology. Administered by Medical Technology Program.

Exploration of biomedical research careers. Biomedical research in the United States: funding, safety, regulatory agencies, ethics, experimental design, trouble-shooting, and data interpretation.

192 **Environmental Issues Seminar**

Fall, Spring. 1 credit. A student may earn a maximum of 4 credits in all enrollments for this course. Interdepartmental with Agriculture and Natural Resources; Engineering; Social Science; Communication Arts and Sciences. R: Open only to students in the College of Agriculture and Natural Resources or College of Engineering or College of Natural Science or College of Communication Arts and Sciences or College of Social Science. Approval of college.

Environmental issues and problems explored from a variety of perspectives, including legal, scientific, historical, political, socio-economic, and technical points of view.

201

Science Problem Solving Seminar I Fall. 2(2-0) P:M: (MTH 1825 or concurrently or MTH 116 or concurrently or MTH 132 or concurrently) R: Approval of college.

Problem solving principles and strategies used in the disciplines of science and mathematics. Activities reflecting the types of problems encountered.

Science Problem Solving Seminar II

Spring. 2(2-0) P:M: (NSC 201) R: Approval of college.

Continuation of NSC 201.

203 **Drew Laboratory Directed Studies**

Fall, Spring, Summer. 1 to 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (NSC 202) R: Open only to Drew Laboratory students.

Using topics related to a faculty member's ongoing research, students explore the relationship between science and technology and social issues.

Science for Elementary Schools

Fall, Spring. 3(3-0) RB: Completion of an ISB and ISBL or ISP and ISPL course. Completion of the majority of complementary studies coursework in science and math. R: Open only to students in the Elementary Teacher Education Program.

Topics in earth science, life science, and physical science or explored through discussion, dependent.

science explored through discussion, demonstrations, readings, presentations, and field trips.

390 **Special Problems**

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department

Faculty directed individualized study of an interdisciplinary problem.

Science Laboratories for Secondary Schools (W)

Fall. 4(2-6) R: Open only to seniors in the BA degree in Chemistry, or the BS degree in Biological Science-Interdepartmental or Earth Science-Interdepartmental or General Science-Interdepartmental or Physical Science-Interdepartmental major or their associated LBS majors.

Laboratory equipment, supplies, demonstrations, exercises, and safety. Care of live organisms. Disposal of biological and chemical wastes. Field trips required.

Ecology, Law and Economics 448

Spring. 3(3-0) P:M: (EC 201)

Review and integrate principles of ecology, fundamentals of law, and principles of economics into a conceptual model that describes interrelations among the natural system, the economy, and the state. Analyze and assess the legal-economic natural resource and environmental policies in the context of the integrated model. Relate the ecology-laweconomics model to emerging paradigms of sus-tainable development, ecological economics, industrial ecology, and the Natural Step.

Special Problems

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course, R: Approval of department.

Faculty directed individualized study of an interdisciplinary problem.

Selected Topics

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of

Selected interdisciplinary topics not normally covered in other courses.

Capstone in Human Biology (W) 495

Fall, Spring. 2(2-0) P:M: Completion of Tier I writing requirement. R: Open only to seniors in the Human Biology or Lyman Briggs Human Biology major.

Integration of human biology disciplines with a focus on health and disease.

496 **Directed Study in Human Biology**

Fall, Spring, Summer. 1 to 3 credits. P:M: Completion of Tier I writing requirement.

Directed studies in human biology.

Internship in Human Biology

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: Completion of Tier I writing requirement.

Practical experience applying human biology training outside the classroom setting.

Research in Human Biology

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: Completion of Tier I writing requirement.

Research in faculty laboratories

499 Research

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to juniors or seniors in the College of Natural Science with a teacher certification option.

Research in faculty laboratories. Oral and written presentations.

NURSING NUR

College of Nursing

202 Introduction to Nursing Practice I

Fall. 2(1-3) R: Open only to students in the College of Nursing except students in PreNursing and Registered Nurses.

Theoretical concepts of nursing necessary for professional practice. Assessment, interpersonal communication, documentation and decision-making.

204 Introduction to Nursing Practice II

Spring. 4(2-6) P:M: (NUR 202 and PHM 350 or concurrently) C: PHM 350 concurrently.

Nursing practice concepts in simulated and clinical practice settings. Development of nursing practice psychomotor skills.

Core Competencies in Nursing I

Fall, Spring. 1(1-0) R: Open only to students in the College of Nursing.

Assessment core nursing competencies applying natural, social and nursing science.

Concepts of Nursing Care of the Adult 303

Fall, Spring. 4(4-0) P:M: (NUR 204 and NUR 341) C: NUR 304 concurrently.

Family centered nursing care for adults at various levels of health and illness. Prototype health states with emphasis on associated nursing diagnosis and professional standards of care.

304

Practicum in Nursing Care of the Adult Fall, Spring. 4(0-12) P:M: (NUR 204 and NUR 341) C: NUR 303 concurrently.

Nursing care of the adult client with an emphasis on health promotion, disease prevention, care in acute and chronic illness, and rehabilitation.

305 Concepts of Nursing Care of the

Childbearing Family
Fall, Spring. 2(2-0) P:M: (NUR 204 and NUR 341) C: NUR 306 concurrently.

Concepts of holistic nursing care with culturally diverse childbearing families during the prenatal, intrapartum, and postpartum periods. Concepts of health promotion and risk factors in client care situa-

306 Practicum in Nursing Care of the Childbearing Family

Fall, Spring. 3(0-9) P:M: (NUR 204 and NUR 341) C: NUR 305 concurrently.

Practicum in nursing care with culturally diverse childbearing families during the prenatal, intrapartum and postpartum periods. Implementation of nursing process in various settings. Levels of risk reduction and health promotion.

307 Concepts of Nursing Care of Children and Their Families

Fall, Spring. 2(2-0) P:M: (NUR 204 and NUR 341) C: NUR 308 concurrently.

Theory and concepts related to the holistic care of children (infancy through adolescence) and their families.

308 Practicum in Nursing Care of Children and Their Families

Fall, Spring. 3(0-9) P:M: (NUR 204 and NUR 341) C: NUR 307 concurrently.

Clinical application of the theoretical concepts presented in NUR 307. Variety of health settings will be utilized for clinical practice.

Transition to Baccalaureate Nursing and Online Learning Fall. 1(1-0) R: Open only to students in the

Fall. 1(1-0) R: Open only to students in the RN tracking major.

Issues, role and scope of baccalaureate nursing practice. Concepts of and applications in online learning.

314 Transition to Professional Nursing

Fall, Spring. 4(3-3) Fall: Given only at various off-campus sites.. R: Open only to Registered Nurses in the College of Nursing.

Concepts and practicum for role transition for Registered Nurse seeking degree completion. Assessment, documentation, interpersonal skills and concepts of aging with emphasis on clinical decision making and socialization to professional role.

315 Core Competency in Nursing II

Fall, Spring. 1(1-0) P:M: (NUR 215) R: Open only to students in the College of Nursing.

Continuing assessment core of nursing competencies integrating natural, social, and nursing science.

316 Health and Physical Assessment

Fall. 3(1-6) R: Open only to students in the RN tracking major.

Health and physical assessment, documentation and interpersonal skills. Concepts of aging and cultural competence within the context of clinical decision-making.

319 Introduction to Nursing Theory and Research

Spring. 3(3-0) P:M: (STT 200 or STT 201) and completion of Tier I writing requirement. R: Open only to students in the College of Nursing except students in PreNursing.

Major nursing theories and their application to practice. The research process, terminology and investigations undertaken in nursing.

341 Clinical Problems in Adaptation

Spring. 3(3-0) R: Open only to students in the College of Nursing except students in PreNursing.

Theoretical concepts related to individual's adaptive-maladaptive responses to stress. Emphasis on pathophysiology.

400 Pharmacology for Nurses

Spring. 3(3-0) P:M: (NUR 313 and NUR 316 and NUR 341) R: Open only to students in the RN tracking major.

Principles of nursing management in drug therapy, drug classifications and patient-related variables. Assessment and evaluation of patient responses in relation to health, age, lifestyle, gender, ethnicity and other cultural factors.

407 Concepts in Community Health Nursing

Summer. 2(2-0) P:M: (NUR 313 and NUR 316 and NUR 341 and NUR 400) R: Open only to students in the RN tracking major.

Theoretical foundation for contemporary community

Theoretical foundation for contemporary community and public health nursing practice.

409 Concepts of Psychiatric, Mental, and Community Health Nursing

Fall, Spring. 4(4-0) P:M: Completion of Tier I writing requirement. R: Open only to students in the College of Nursing except students in PreNursing.

Health care trends and issues in public and mental health. Role, responsibilities, and activities of nurses in the provision of care in public and mental health.

410 Practicum in Community Health Nursing

Fall, Spring. 3(0-9) P:M: Completion of Tier I writing requirement. R: Open only to students in the College of Nursing except students in PreNursing. C: NUR 409 concurrently.

Clinical experience in community health nursing focusing on application of public health and nursing principles in the care of individuals, families and aggregates in a variety of settings.

412 Practicum in Psychiatric and Mental Health Nursing

Fall, Spring. 3(0-9) R: Open only to students in the College of Nursing except students in PreNursing. C: NUR 409 concurrently.

Theoretical perspectives of behavior applied to mental health nursing in a practice setting. Advanced concepts of communication. Use of self, group and milieu are used to define the nurse's role.

413 Issues in Professional Nursing

Fall, Spring. 2(2-0) P:M: Completion of Tier I writing requirement. R: Open only to students in the College of Nursing except students in PreNursing.

Past, current, and future impact of selected legal, economic, educational, social, political, ethical, and professional forces on health care and nursing practice at local, national, and international levels.

415 Core Competencies in Nursing III

Fall, Spring. 1(1-0) P:M: (NUR 315) R: Open only to students in the College of Nursing.

Advanced assessment core of nursing competencies synthesizing natural, social, and nursing science

416 Leadership and Management in Nursing

Fall, Spring. 3(1-2) R: Open only to students in the College of Nursing. Not open to students with credit in NUR 420.

Roles and responsibilities related to leadership and management in nursing practice. Impact of management theories and processes on nursing practice and the delivery of health care within organizations.

420 Senior Practicum in Nursing

Fall, Spring. 4(1-9) R: Open only to students in the College of Nursing except students in PreNursing.

Synthesis and application of nursing concepts as they relate to health care delivery in a variety of health care settings.

422 Nursing in Great Britain

Summer. 5(5-0) Summer: Given only in London, England.. R: Approval of College. Historical evolution of nursing in the National Health Service: British nursing education, hospital and community health nursing, standards of care, research, and management. Influence of professional nursing upon British national health policies.

430 Nursing Care of the Critically III Client Fall. 3(2-3) P:M: (NUR 304 and NUR 306 and NUR 308)

Advanced medical-surgical nursing concepts. Preceptored practicum.

490 Independent Study in Nursing

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to students in the College of Nursing except students in PreNursing. Approval of college. Individualized area of study in Nursing.

491 Special Topics

Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to students in the College of Nursing except students in PreNursing.

Exploration of selected issues in nursing.

OSTEOPATHIC OST MEDICINE

College of Osteopathic Medicine

401 Selected Topics in Osteopathic Medicine

Fall, Spring. 1(1-0) RB: Student with academic interest and career focus toward medicine and the health sciences. Classical, current and innovative osteopathic medical trends in patient treatment

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101 Freshman Seminar

Fall, Spring. 0 to 1 credits. A student may earn a maximum of 2 credits in all enrollments for this course. R: Open only to freshmen.

Introduction to the academic life of the University. Special topics proposed by faculty to engage the interests of new students.

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