Description — Natural Science of Courses

172H. Our Place in Nature (N)  
Winter. 4(4-0) Honors College students or approval of department.  
Various issues confronting us in our attempt to understand our place in and relation to the environment. Emphasis on the role of science in helping to resolve these issues.

173H. Science-Technology and Human Values (N)  
Spring. 4(4-0) Honors College students or approval of department.  
The nature and significance of science and technology in Western culture, with emphasis on their relationship to other creative activities, particularly those within the arts.

1814. Natural Science (N)  
Fall. 4(3-2) Not open to students with credit in NS 115. Enrollment in Remedial-Developmental Writing Program or approval of department.  
Scientific methods emphasizing development and modification of explanation systems. The nature of cellular and sexual reproduction as background for Mendelian gene theory and its modern modifications. Social implications are emphasized.

1824. Natural Science (N)  
Winter. 4(3-2) Not open to students with credit in NS 125. NS 1814 or approval of department.  
Scientific methods with emphasis on evolutionary ideas regarding origins of earth features as related to modern problems. Human origins and development are considered, with a number of modern problems.

1834. Natural Science (N)  
Spring. 4(3-2) Students may not receive credit in more than one of the following: AST 110, AST 217, AST 220, NS 125, NS 155, NS 1834. NS 1824 or approval of department.  
Nature of science as exemplified by ideas from physical sciences. The Copernican Revolution is used as an example of the science-society interaction. Modern concepts of cosmology are also introduced.

200. Technology, Society and Public Policy  
Winter. 3(3-0) Twelve credits from natural science or engineering. Interdepartmental with and administered by Engineering.  
Description and analysis of certain current technologies and their consequences; exploration of avenues for assessing such consequences as an aid to formulation of public policy.

209. Humans and Disease (N)  
Fall, Winter, Spring. 4(4-0)  
Disease as a natural biological phenomenon and how it has influenced the human race from a worldwide perspective. Environmental and cultural factors and how these influence and interrelate with disease.

242. Wilderness Environmental Field Studies (N)  
Winter, Summer. 4(4-0) Approval of instructor. Students may not receive credit in more than one of the following: NS 142, NS 142A. N 242.  
Study of ecosystem balance between physical, biological and human elements while hiking in selected wilderness areas. Requires out-of-state travel.

NATURAL SCIENCE NSC (COLLEGE OF)

201. Science Problem Solving Seminar I  
Fall. 2(2-0) MTH 105 concurrently, approval of instructor.  
Problem solving principles and application of strategies to the disciplines of science and mathematics. Activities reflecting the types of problems encountered in these disciplines emphasized.

202. Science Problem Solving Seminar II  
Winter. 2(2-0) NSC 201, approval of instructor.  
Continuation of NSC 201. Emphasis upon problem solving in science disciplines and principles of research design.

203. Science Problem Solving Seminar III  
Spring. 2(1-3) May reenroll for a maximum of 4 credits. NSC 202, approval of instructor.  
Applied experience in research. Design and implementation of simple research problems. Relationship of science and society.

305. Women in Science  
Spring. 3(3-0) Introductory course in chemistry or physics or biological science or approval of instructor.  
The development of women scientists of the past, present, and future will be examined. Emphasis will be on representatives from physics, biology, medicine, mathematics, and engineering.

394H. Current Topics in Science (MTC)  
Fall, Winter. 3(3-0) May reenroll for a maximum of 6 credits if different topics are taken. Approval of Honors College or course coordinator.  
Scientists from several disciplines lecture on a common topic of current scientific interest, indicating the key concepts, the analytic approaches, the processes and the constraints of their respective disciplines.

410. Environmental Toxicology  
Winter. 4(4-0) S 212, BCH 401.  
Interdepartmental with Agriculture and Natural Resources.  
Toxic effects of pesticides on soil, plants, wildlife, and aquatic systems. Interactions between chemicals and the environment which influence their fate and ecological importance.

445. Pest Management: Pesticide Chemistry and Application Systems for Plant Protection  
Fall. 3(3-0) CEM 143, ENT 425, HRT 402 or CSS 405, BOT 405 or concurrently or approval of instructor. Interdepartmental with Agriculture and Natural Resources.  
A broad overview of pesticide chemistry, efficient usage, environmental fate, legislation and application techniques.

446. Pest Management: Biological Systems for Plant Protection  
Fall. 3(3-0) ENT 425, HRT 402 or CSS 405, BOT 405 or concurrently or approval of instructor. Interdepartmental with Agriculture and Natural Resources.  
Management of plant pests utilizing host resistance, cultural practices, legislation, and biological systems.

447. Pest Management: Systems Management for Plant Protection (444) Winter. 4(3-2) NSC 445, NSC 446 or approval of instructor. 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.

492. Integrative Studies  
Fall, Winter, Spring, Summer. 3 to 5 credits. Juniors.  
In-depth study of topics which require an integration within or among the natural sciences or between the natural sciences and other major areas of human knowledge.

801. Special Problems in Electron Microscopy  
Fall, Winter, Spring, Summer. 1 to 15 credits. Approval of instructor.
NURSING — Description of Courses

200. Nursing I
Spring. 3(3-0) or 4(4-0) Approval of college.

201. Nursing II
Winter. 4(4-0) Approval of college. N E 203 concurrently.

202. Introduction to Professional Nursing Practice
Winter. 3(3-0) Approval of college. N E 203 concurrently. Not open to Registered Nurses.

203. Introduction to Professional Nursing Practice Practicum
Winter. 3(0-0) Approval of college. N E 203 concurrently. Not open to Registered Nurses.

210. Concepts of Nursing Care of the Young and Older Adult
Fall, Winter, Spring. 3(3-0) Approval of college. N E 304 concurrently.

211. Practicum in Nursing Care of the Young and Older Adult
Fall, Winter, Spring. 4(0-12) Approval of college. N E 305 concurrently.

212. Professional Nursing I: Basic Concepts
Winter. 2(2-0) Approval of college.

213. Transition to Professional Nursing
Fall. 3(3-0) Approval of college. Open only to Registered Nurses.

300. Nursing II
Fall. 10(7-9) N E 200, FCE 200, FCE 255, HCP 450, N E 201, N E 301.

301. Nursing III
Winter. 10(6-12) N E 300.
Application of entire nursing process in a variety of health care settings. Approved through Fall 1989.

302. Nursing IV
Spring. 10(6-12) N E 301, N E 441.

303. Concepts of Nursing Care of the Young and Older Adult
Fall, Winter, Spring. 3(3-0) Approval of college. N E 304 concurrently.

304. Practicum in Nursing Care of the Young and Older Adult
Fall, Winter, Spring. 4(0-12) Approval of college. N E 305 concurrently.

305. Concepts of Nursing Care of the Childbearing Family
Fall, Winter, Spring. 3(3-0) Approval of college. N E 306 concurrently.
Concepts of nursing care of the childbearing family during prenatal, intrapartum and postpartum periods. Approved through Summmer 1990.

306. Practicum in Nursing Care of the Childbearing Family
Fall, Winter, Spring. 4(0-12) Approval of college. N E 307 concurrently.

307. Concepts of Nursing Care of Children and Their Families
Fall, Winter, Spring. 3(3-0) Approval of college. N E 308 concurrently.

308. Practicum in Nursing Care of Children and Their Families
Fall, Winter, Spring. 4(0-12) Approval of college. N E 309 concurrently.
Application of nursing process to children with potential or real altered health states and their families. Implementation of health promotion and growth and development concepts. Approved through Summer 1990.

312. Professional Nursing III: Change and the Change Process
Fall, Winter, Spring. 3(3-0) N E 310, N E 401 concurrently.
Application of the nursing process to children with potential or real altered health states and their families. Implementation of health promotion and growth and development concepts. Approved through Summer 1990.

400. Nursing V
Fall. 10(5-15) N E 302, PSY 425.

401. Nursing VI
Winter. 10(4-15) N E 400.

402. Concepts of Advanced Nursing Care of the Young and Older Adult
Fall, Winter, Spring. 3(3-0) Approval of college. N E 404 concurrently.
Concepts of care of adult and elderly clients with complex health problems. Professional, legal, ethical issues and relevant research. Approved through Fall 1990.

403. Practicum in Advanced Nursing Care of the Young and Older Adult
Fall, Winter, Spring. 4(0-12) Approval of college. N E 405 concurrently.
Clinical practice in nursing care of the childbearing family. Development of interpersonal communication and documentation skills. Accountability in nursing practice. Approved through Fall 1990.

404. Concepts of Community Health Nursing
Fall, Winter, Spring. 3(3-0) Approval of college. N E 406 concurrently.
Theoretical concepts in nursing care of the childbearing family. Development of interpersonal communication and documentation skills. Accountability in nursing practice. Approved through Fall 1990.

405. Concepts of Community Health Nursing
Fall, Winter, Spring. 3(3-0) Approval of college. N E 407 concurrently.
Theoretical concepts in nursing care of the childbearing family. Development of interpersonal communication and documentation skills. Accountability in nursing practice. Approved through Fall 1990.

406. Practicum in Community Health Nursing
Fall, Winter, Spring. 4(0-12) Approval of college. N E 408 concurrently.
Clinical practice in nursing care of the childbearing family. Development of interpersonal communication and documentation skills. Accountability in nursing practice. Approved through Fall 1990.