

- 962. Analytical Studies in Music Literature**
Spring, Summer. 3(3-0) 961.
Continuation of 961.
- 970. Contrapuntal Techniques**
Fall of odd-numbered years, Summer. 3(3-0) 482 or approval of department.
Advanced contrapuntal practice from the sixteenth century to the present.
- 971. Contrapuntal Techniques**
Winter of even-numbered years, Summer. 3(3-0) 970.
Continuation of 970.
- 972. Contrapuntal Techniques**
Spring of even-numbered years, Summer. 3(3-0) 971.
Continuation of 971.
- 980. Seminar in Theory**
Fall, Winter, Spring, Summer. 3(3-0)
May re-enroll for a maximum of 9 credits. 482 or approval of department.
- 999. Research**
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

NATURAL RESOURCES N R

College of Agriculture and Natural Resources

- 202. Soils and Man's Environment**
Winter. 3(3-0) *Interdepartmental with the Resource Development, and Fisheries and Wildlife Departments and Soil Science and administered by Soil Science.*
Use of soil and water resources in a technological society as it relates to environmental quality. Nature of pollution problems and their possible solutions. Food production and world population.
- 220. Plants and Their Environment**
Winter. 3(3-0) *Interdepartmental with and administered by the Forestry Department.*
Fundamental ecological relationships between various climatic, edaphic and biotic environmental factors of the ecosystem and plant response, including structure, function and evaluation of species.
- 275. Exploring International Agriculture**
Spring. 3(3-0) *Interdepartmental with and administered by Agriculture.*
Exploration of overseas assignments with international agencies; potential world food actualities and potentialities; special problems of the tropics compared with those in temperate regions.
- 450. Natural Resource Administration**
Fall, Spring. 4(4-0) *Interdepartmental with Fisheries and Wildlife, Forestry, Parks and Recreation Resources and Resource Development Departments. Administered by the Forestry Department.*
Concepts and methods of administering wild-land properties. The legal, economic and social environment. Benefit-cost analysis of management changes. Unit organization, personnel management and accounting. Presents a systems view of administration.

- 475. International Studies in Agriculture and Natural Resources**
Summer. 3 to 9 credits. *Approval of the college. Interdepartmental with and administered by Agriculture.*
Study-travel experience emphasizing contemporary problems affecting agriculture in the world, national, and local communities. Field trips, case studies, interviews with leading experts, government officials, community leaders. Supervised individual study.
- 491. Natural Resources and Modern Society**
Spring, Summer. 3(3-0) *Juniors. Interdepartmental with the Forestry and the Resource Development Departments and administered by Forestry Department.*
A survey of the social and economic significance of natural resources in modern industrial and urban society. Current problems of natural resources management and use are examined in terms of the society in which they exist.

NATURAL SCIENCE N S

University College

Students may earn credit in only one of the courses in each of the following three groups:

1. 111, 117, 121, 131,
2. 112, 118, 122, 132, 134,
3. 113, 116, 120, 133,

1. 151, 171H, 181, 322
2. 152, 172H, 182, 323
3. 150, 160, 173H, 183, 321

- 111. The Nature of Science I**
(192A.) Fall, Winter, Spring, Summer. 4(2-3)
The development and validation of scientific concepts as examples of man's attempt to understand the world in which he lives. Selected topics from the life sciences illustrate the process of scientific investigation.
- 112. The Nature of Science II**
(193A.) Fall, Winter, Spring, Summer. 4(2-3) 111 preferred; or 117, 121, 131, 151, 171H, 181, or 322.
Man's attempts to explain the present in terms of past events are explored through selected topics from the life sciences and earth sciences. Stresses the role of controversy in science and the nature of scientific evidence.
- 113. The Nature of Science III**
(183, 191A.) Fall, Winter, Spring, Summer. 4(2-3) 112 preferred; or 118, 122, 132, 134, 152, 172H, or 182.
The origin and development of scientific explanations of the physical world. The origins of modern science and scientific revolutions.
- 116. Integrated Studies in Science I**
(191D.) Fall, Winter, Spring, Summer. 4(2-3)
Science as a process of studying of nature, explored through consideration of the organization science perceives in nature. Topics from the physical and life sciences used to illustrate the integration of the sciences into a concept of natural systems.
- 117. Integrated Studies in Science II**
(192D.) Fall, Winter, Spring, Summer. 4(2-3) 116 preferred; or 120, 150, 160, or 321.
The nature of scientific theories and the means of supporting or refuting them. Emphasis on the interaction of theories from the physical, earth and life sciences.
- 118. Integrated Studies in Science III**
(193D.) Fall, Winter, Spring, Summer. 4(2-3) 117 preferred; or 111, 121, 131, 151, 171H, 181, or 322.
The use and limitations of scientific problem-solving. The interaction of the physical, earth and life sciences in the development of integrative-interdisciplinary solutions to important contemporary problems.
- 120. Science, Beliefs and Values I**
(191B.) Fall, Winter, Spring, Summer. 4(2-3)
Man's attempts to understand the universe and his place within it. The interaction between scientific concepts and the beliefs and values of the culture in which they are proposed.
- 121. Science, Beliefs and Values II**
(192E.) Fall, Winter, Spring, Summer. 4(2-3) 120 preferred; or 116, 150, 160, or 321.
The nature of living things, contrasting various scientific and non-scientific views. The implications of the modern scientists' understanding of life for our beliefs and values.
- 122. Science, Beliefs and Values III**
(193B.) Fall, Winter, Spring, Summer. 4(2-3) 121 preferred; or 111, 117, 131, 151, 171H, 181, or 322.
Man's current understanding of himself and his beliefs as products of biological and cultural evolution. Implications for man's future.
- 131. Science, Man and Society I**
(192C.) Fall, Winter, Spring, Summer. 4(2-3)
The role science plays in our lives is explored through consideration of aspects of reproduction and heredity. Emphasis on the origin of scientific explanations and their significance to the individual.
- 132. Science, Man and Society II**
(193C.) Fall, Winter, Spring, Summer. 4(2-3) 131 preferred; or 111, 117, 121, 151, 171H, 181, or 322.
The origin and evolution of earth and man are studied as vital and related problems. Emphasis on problem-solving in science and the impact of evolutionary concepts on human societies.
- 133. Science, Man and Society III**
(191C.) Fall, Winter, Spring, Summer. 4(2-3) 132 preferred; or 112, 118, 122, 134, 152, 172H, or 182.
Origin, growth and nature of theories in modern science. Includes aspects of astronomy and radioactivity. Emphasis on the application of scientific methodology and its products to problems of society.
- 134. Science, Man and Society IV**
(193F.) Fall, Winter, Spring, Summer. 4(2-3) 131 preferred; or 111, 117, 121, 151, 171H, or 181.
Biological concepts of race. Exploration of scientific alternatives to the currently held biological concept of race.
- 150. The Dynamics of Scientific Ideas I**
(191E.) Fall, Winter, Spring, Summer. 4(2-3)
The role of science in the development of western man's ideas about reality. The origin and development of mechanistic concepts of the physical world and their part in intellectual dialogue.
- 151. The Dynamics of Scientific Ideas II**
(192E.) Fall, Winter, Spring. 4(2-3) 150 preferred; or 116, 120, 160, or 321.
The influence of scientific ideas about the living world on the western intellectual tradition. Emphasis on the successes and failures of scientific ideas in offering a unified picture of reality.