The ENST concentration in Environmental Health gives students the concepts and skills to work in this broad and increasingly important field with wide ranging applications in the environmental science and public health fields. The field encompasses environmental factors and ecosystem functions that affect human health and the effects of human activities on the ecosystem products and services we depend on. Example topics within the field include ecological risk analysis, environmental toxicology, environmental impact assessment, chemical fate and transport, human health risk assessment, industrial hygiene, air quality, environmental microbiology, food safety and security, biodiversity and human health, and children’s environmental health.

Science and Math Fundamentals Required (56-57 credits):

- **ENST 200** Fundamentals of Soil Science (4)
- **ENST 233** Introduction to Environmental Health (3)
- **ENST 360** Ecosystem Ecology (4)
- **ENST 389** Internship (3)
- **ENST 471** Capstone I (2)
- **ENST 472** Capstone II (3)
- **BSCI 105** Principles of Biology I (4)
- **BSCI 106** Principles of Biology II (4)
- **BSCI 207** Principles of Biology III (3)
- **BSCI 223** General Microbiology (4)
- **CHEM 131/132** Fundamentals of General Chemistry & Lab (4)
- **CHEM 231/232** Organic Chemistry I & Lab (4)
- **CHEM 241/242** Organic Chemistry II & Lab (4)
- **MATH 140** Calculus I (4) - or - **MATH 220** Elementary Calculus I (3)
- **PHYS 121** Fundamentals of Physics (4)
- **BIOM 301** Introduction to Biometrics (3)

Concentration Depth (12 credits):

- **ENST 333** Ecosystem Health and Protection (3)
- **ENST 334** Environmental Toxicology (3)
- **ENST 434** Toxic Contaminants: Sources, Fate, and Effects (3) - or -
  **ENST 436** Emerging Environmental Threats (3)
- **ENST 445** Ecological Risk Assessment (3)

Ecosystem Health and Human Health Electives (12 credits)

Example courses listed on reverse side. Courses applied to elective requirements may not be applied to other curriculum requirements.

---

Highlighted Courses are ENST CORE

Benchmark to be completed by 30 credits
Benchmark to be completed by 60 credits
Benchmark to be completed by 90 credits
Requires prior approval
Students will take approximately 6 credits each of Ecosystem Health and Human Health electives to tailor their program to their specific interests (total = 12 credits). Ecosystem Health electives cannot be double-counted as Human Health Electives, and vice-versa. This is not an exhaustive list of electives; other ecosystem and human health courses can be substituted with advisor approval.

Ecosystem Health Electives (at least 6 credits):
- **ANSC 252**  Introduction to the Diseases of Wildlife (3)
- **AOSC 200/201** Weather and Climate & Lab (4)
- **AOSC 434** Air Pollution (3)
- **BSCI 222** Principles of Genetics (4)
- **BSCI 330** Cell Biology and Physiology (4)
- **BSCI 447** General Endocrinology (3)
- **BSCI 467** Freshwater Biology (4)
- **BSCI 473** Marine Ecology (3)
- **CHEM 271/272** General Chemistry and Energetics & Bioanalytical Lab (4)
- **ENST 314** Fisheries Sustainability and Management (3)
- **ENST 405** Energy and Environment (3)
- **ENST 415** Renewable Energy (3)
- **ENST 421** Soil Chemistry (4)
- **ENST 422** Soil Microbial Ecology (3)
- **ENST 423** Soil-Water Pollution (3)
- **ENST 430** Wetland Soils (3)
- **ENST 440** Crops, Soils and Civilization (3)
- **ENST 441** Sustainable Agriculture (3)
- **ENST 443** Industrial Ecology (3)
- **ENST 450** Wetland Ecology (3)
- **ENST 451** Water Quality: Field and Lab Analysis Methods (3)
- **ENST 460** Principles of Wildlife Management (3)
- **ENST 461** Urban Wildlife Management (3)
- **ENST 462** Field Techniques in Wildlife Management (2)
- **ENST 463** Wildlife Habitat and Population Modeling (3)
- **ENST 479** Tropical Ecology and Resource Management (3)
- **ENST 499** Special Topics in Environmental Science and Technology (1-4)
- **GEOG 415** Land Use, Climate Change, and Sustainability (3)
- **GEOG 418** Field and Laboratory Techniques in Environmental Science (1-3)
- **GEOG 331** Introduction to Human Dimensions of Global Change (3)
- **ENST 499** Special Topics in Environmental Science and Technology (1-4)
- **GEOG 431** Culture and Natural Resource Management (3)
- **HLTH 140** Personal and Community Health (3)
- **HLTH 371** Communicating Safety and Health (3)
- **HLTH 430** Health Education in the Workplace (3)
- **MIEH 321** Syphilis to SARS (3)
- **NFSC 430/434** Food Microbiology & Lab (5)

Human Health Electives (at least 6 credits):
- **ANTH 262** Culture and Environment (3)
- **ANTH 410** Culture, Health and Community Development (3)
- **BSCI 201** Human Anatomy and Physiology I (4)
- **BSCI 202** Human Anatomy and Physiology II (4)
- **BSCI 330** Cell Biology and Physiology (4)
- **BSCI 417** Microbial Pathogenesis (3)
- **BSCI 422** Principles in Immunology (3)
- **BSCI 424** Pathogenic Microbiology (3)
- **BSCI 425** Epidemiology and Public Health (3)
- **BSCI 437** General Virology (3)
- **BSCI 440** Mammalian Physiology (4)
- **BSCI 464** Microbial Ecology (3)
- **ENST 432** Environmental Microbiology (3)
- **ENST 436** Emerging Environmental Threats (3)
- **ENST 499** Special Topics in Environmental Science and Technology (1-4)
- **GEOG 331** Introduction to Human Dimensions of Global Change (3)
- **GEOG 431** Culture and Natural Resource Management (3)
- **HLTH 140** Personal and Community Health (3)
- **HLTH 371** Communicating Safety and Health (3)
- **HLTH 430** Health Education in the Workplace (3)
- **MIEH 321** Syphilis to SARS (3)
- **NFSC 430/434** Food Microbiology & Lab (5)