

BACHELOR OF SCIENCE IN FOREST HEALTH

Forest Health is a multidisciplinary and collaborative field of study that involves the understanding, monitoring, and protection of the world's forest resources. Forests support biodiversity, provide immense ecosystem services including water purification and carbon sequestration, and provide essential raw materials. Forest health experts support healthy forests by managing threats caused by invasive species, poor management, climate change, fire, and other anthropogenic factors.

A foundation in forest health requires coursework in ecology, dendrology, forest management, silviculture, mycology, plant pathology, and entomology. This major was developed to address the demand for broadly trained graduates to work in wide range of professional capacities in government agencies, the private sector, and academia.

Required Courses

APM 210

EFB 101

EFB 102

EFB 103

EFB 104

EFB 120

EFB 132

EFB 202

EFB 210

EFB 211

EFB 245

OR

EFB 344

EFB 303

EFB 307

EFB 308

EFB 311

EFB 320

EFB 336

EFB 340

EFB 351

OR

EFB 352

EFB 420

OR

EFB 498

EFB 425

EFB 439

EFB 494

EWP 190

EWP 290

FCH 150

FCH 151

FCH 152

FCH 153

FCH 210

FOR 334

FOR 345

FOR 110

NOTE: 3 credits of EFB 498 or EFB 420 are required.

Electives

Course	Codes*	Credits
General Education Course in one of the following categories: US History & Civic Engagement, The Arts, World History and Global Awareness, World Languages	G	3

General Education Course in Diversity, Equity, Inclusion and Social Justice	G	3
Directed Electives		15
Open Electives		19

Directed Electives

To ensure that Forest Health majors obtain both strength and breadth of knowledge, 15 elective credit hours must be selected from the following list, including at least one course from five of the seven categories.

A. Forest Protection and Conservation Biology

- EFB 390 Wildlife Ecology & Management (4 cr.) F
- EFB 413 Intro Conservation Biology (3 cr.) S
- EFB 502 Ecology and Management of Invasive Species (3 cr.) F

B. Forestry/Wood Products

- FOR 322 Natural Resources Measurements and Sampling (3 cr.) F
- FOR 360 Principles of Management (3 cr.) F,S
- FOR 465 Natural Resources and Policy (3 cr.) S
- FOR 480 Urban Forestry (3 cr.)

C. Technology

- BTC 401 Molecular Biology Techniques (3 cr.) F
- BTC 425 Plant Biotechnology (3 cr.) S
- BTC 426 Plant Tissue Culture Methods (3 cr.) F
- ESF 300 Introduction to Geospatial Information Technologies (3 cr.) F,S

D. Ecology and Environmental Science

- EST 370 Introduction to Personal Environmental Interpretation Methods (3 cr.) F
- EFB 445 Plant Ecology and Global Change (3 cr.) S
- EFB 505 Microbial Ecology (3 cr.) S
- EFB 516 Ecosystems (3 cr.) S
- FOR 338 Meteorology (3 cr.) F

E. Biodiversity

- EFB 326 Plant Evolution, Diversification and Conservation (3 cr.) S
- EFB 342 Fungal Ecology and Diversity (3 cr.) CLBS
- EFB 351 Forest Entomology (3 cr.) F, even years
- EFB 352 Entomology (3 cr.) F, odd years
- EFB 355 Invertebrate Zoology (4 cr.) S
- EFB 435 Flowering Plants: Diversity, Evolution, and Systematics (3 cr.) F
- EFB 440 Mycology (A) (3 cr.) F
- EFB 453 Parasitology (3 cr.) F
- EFB 482 Ornithology (4 cr.) S
- EFB 483 Mammal Diversity (4 cr.) F
- EFB 485 Herptology (3 cr.) F
- EFB 486 Ichthyology (3 cr.) S
- EFB 566 Systematic Entomology (3 cr.) S, even years

F. Mathematics and Physical Science

- APM 105 Survey of Calculus and Application I (4 cr.) F,S
- APM 106 Calculus and its Applications II (A) (4 cr.) F,S
- APM 510 Statistical Analysis (3 cr.) F
- FOR 323 Forest Biometrics (3 cr.) S
- EPH 103/104 Fundamentals of Physics II (A) (4 cr.) S

G. Anatomy and Physiology

- EFB 325 Cell Biology (3 cr.) S
- EFB 429 Plant Physiology (3 cr.) S
- EFB 462 Animal Physiology: Environmental & Ecological (4 cr.) S
- EFB 530 Plant Physiology (3 cr.) S
- EFB 531 Plant Physiology Lab (2 cr.) S
- EFB 570 Insect Physiology (3 cr.) S

Total Minimum Credits For Degree: 126

