

COLLEGE OF NATURAL RESOURCES AND ENVIRONMENT
Department of Forest Resources and Environmental Conservation
Bachelor of Science in Forest Resources and Environmental Conservation
Major: Environmental Conservation & Society
For students graduating in calendar year 2021

Minimum credit hours required for graduation is 120. Prerequisites or enrollment restrictions may apply to some courses; consult the undergraduate course catalog, timetable of classes, or check with your advisor.

Degree Core Requirements (21 credits):

- ___ FREC 2214 Introduction to Land and Field Measurements* (3 credits)
- ___ FREC 2314 Forest Biology and Dendrology* (2 credits)
- ___ FREC 2324 Dendrology Laboratory (1 credit)
- ___ FREC 2614 Human-Environment Systems (3 credits)
- ___ FREC 3524 Environmental Interpretation* (3 credits) **or** COMM 2004 Public Speaking (3 credits)
- ___ FREC 4014 (NR 4014) Natural Resources Economics* (3 credits)
- ___ FREC 4114 Information Technologies for Natural Resources Management* (3 credits)
- ___ FREC 4434 Natural Resource Policy* (3 credits)

Required Courses for Environmental Conservation & Society Major (9 or 12 credits)

Note: If FREC 3524 is taken to meet the oral communication requirement in the degree core, then select 9 credits below; otherwise, select 12 credits below to include FREC 3524.

- ___ FREC 2004 Forest Ecosystems **or** FREC 3314 Forest Ecology and Silvics* (3 credits)
- ___ FREC 3524 Environmental Interpretation* (3 credits)
- ___ FREC 3544 Outdoor Recreation Planning and Management (3 credits)
- ___ FIW 4464 Human Dimensions of Fisheries and Wildlife (3 credits)

Required Restricted Electives for Environmental Conservation & Society Major (21 credits)

- ___ Business Restricted Electives (3 credits)
- ___ Environmental Education & Outreach Restricted Electives (3 hours)
- ___ Environmental Science Restricted Electives (6 credits)
- ___ Human Dimensions Restricted Electives (6 credits)
- ___ Role of Science in Society Restricted Elective (3 credits)

Track Areas with Remaining Required Restricted Electives (12 credits)

Students must customize their curriculum to complete one of the following three tracks by selecting an additional 12 credits from one of the three sets of restricted electives outlined below.
(Note: 9 of the 12 credits must be 3000-level or above)

Recreation and Tourism Management Track:

- ___ Human Dimensions of Natural Resources Restricted Electives (3 hours)
- ___ Outdoor Recreation Management & Tourism Restricted Electives (9 hours)

Environmental Education and Outreach Track:

- ___ Environmental Education & Outreach Restricted Electives (6 hours)
- ___ Human Dimensions of Natural Resources Restricted Electives (3 hours)
- ___ Leadership & Sustainability in Natural Resources Restricted Electives (3 hours)

Leadership and Sustainability Track:

- ___ Human Dimensions of Natural Resources Restricted Electives (3 hours)
- ___ Leadership & Sustainability in Natural Resources Restricted Electives (9 hours)

CLE Requirements (36 credits)

Area 1: Writing and Discourse (6 credits)

- ___ ENGL 1105 First Year Writing (3 credits)
- ___ ENGL 1106 First Year Writing (3 credits)

Area 2: Ideas, Cultural Traditions, and Values (6 credits)

- ___ FREC 2554 Leadership for Global Sustainability (3 credits)
- ___ CLE Area 2 course: _____ (3 credits)

Area 3: Society and Human Behavior (6 credits)

- ___ Select one course from the following list (3 credits):
 - ___ AAEC 1005 Economics of the Food & Fiber System
 - ___ ECON 2005 Principles of Economics
- ___ Select one course from the following list (3 credits):
 - ___ COMM 1014 Introduction to Communication Studies
 - ___ GEOG 1004 Introduction to Human Geography
 - ___ GEOG 1115 Seeking Sustainability
 - ___ PSCI 1014 Introduction to United States Government and Politics
 - ___ PSCI 1024 Introduction to Comparative Government and Politics
 - ___ PSYC 1004 Introduction to Psychology
 - ___ SOC 1004 Introductory Sociology
 - ___ SOC 1014 Introduction to Social Anthropology

Area 4: Scientific Reasoning and Discovery (8 credits)

- ___ BIOL 1105 Principles of Biology (3 credits)
- ___ BIOL 1115 Principles of Biology Lab* (1 credit)
- ___ BIOL 1106 Principles of Biology (3 credits)
- ___ BIOL 1116 Principles of Biology Lab* (1 credit)

Area 5: Quantitative and Symbolic Reasoning (6 credits)

- ___ MATH 1025 Elementary Calculus (3 credits)
- ___ STAT 3604 Statistics for the Social Sciences* or STAT 3615 Biological Statistics* (3 credits)

Area 6: Creativity and Aesthetic Experience (1 credit)

- ___ CLE Area 6 course: _____ (1 credit)

Area 7: Critical Issues in a Global Context (3 credits)

- ___ FIW 2114 Principles of Fish & Wildlife Management* (3 credits)

Free Electives (18 or 21 credits)

*Course may have prerequisites, corequisites, or other restrictions. Consult Course Catalog for details.

Restricted Electives

Business Restricted Electives

AAEC/MGT	3454	Small Business Management and Entrepreneurship*	3
ACIS	1004	Accounting Foundations	3
ACIS	2115	Principles of Accounting	3
MGT	3304	Management Theory and Leadership Practice	3
MGT	4334	Ethical Leadership & Corporate Social Responsibility*	3
MKTG	3104	Marketing Management*	3
SBIO	2614	Introduction to Forest Product Marketing	3
SBIO	3004	Sustainable Nature-based Enterprises	3
SBIO	3464	Forest Product Business Systems*	3

Environmental Education & Outreach Restricted Electives

ALCE	4004	Teaching Adults in Agriculture	2
ALCE	4014	Intro to Cooperative Education	3
ALCE	4034	Methods of Planning Education Programs for Agriculture*	3
ALCE	4304	Community Education and Development	3
ALCE	4884	Youth Program Management	3
COMM	2044	Principles of Public Relations	3
COMM	3064	Persuasion*	3
FREC	3574	Environmental Education Service Learning	3
HUM/RLCL	3204	Multicultural Communication	3
TA	2024	Introduction to Acting	3

Environmental Science Restricted Electives

BIOL	2504	General Zoology*	3
BIOL	2704	Evolutionary Biology*	3
BIOL	2804	Ecology*	3
BIOL	4004	Freshwater Ecology*	4
CSES/ENSC/GEOS	3114/3114/3614	Soils*	3
CSES/ENSC	3134	Soils in the Landscape	3
CSES/HORT	3444	World Crops and Cropping Systems	3
ENSC	3604	Fundamentals of Environmental Science*	3
FIW	2314	Wildlife Biology*	3
FIW	2324	Wildlife Field Biology*	3
FIW	3514	Fisheries Techniques*	3
FIW	4214	Wildlife Field Techniques*	3
FIW	4314	Conservation Biology*	4
FIW	4334	Mammalogy*	4
FIW	4414	Population Dynamics and Estimation*	3
FIW	4424	Ichthyology	4
FIW	4434	Wildlife Habitat Ecology and Management*	3
FIW	4534	Ecology and Management of Wetland Systems*	3
FIW	4614	Fish Ecology*	3
FIW	4624	Marine Ecology*	3
FREC	2514	Wildland Fire: Ecology and Management*	3
FREC/HORT	3354	Trees in the Built Environment*	3
FREC	3364	Environmental Silviculture*	3
FREC	3714	Forest Harvesting*	3
FREC/CSES	4334	Principles and Practice of Agroforestry	3
FREC	4354	Forest Soil and Watershed Management*	3
FREC	4374	Forested Wetlands*	3
FREC	4414	Advanced Wildland Fire Management*	3

HORT/FREC	2134	Plants and Greenspaces in Urban Communities	3
SBIO/FREC	2784	Global Forest Sustainability	3

Human Dimensions Restricted Electives

AAEC	3314	Environmental Law	3
AAEC	3324	Environment and Sustainable Development Economics*	3
AAEC	4754	Real Estate Law	3
FREC	4454	Urban and Community Forestry	3
GEOG	3104	Environmental Problems, Population, and Development	3
LAR	3044	Land Analysis and Site Planning*	3
LAR	3264	People, Community, and Place*	3
PHIL	2304	Global Ethics	3
PSCI	3214	Political Participation*	3
PSCI	3224	Public Opinion*	3
PSCI	3334	Judicial Process*	3
PSCI	3354	Constitutional Law: Structures and Relationships*	3
PSCI/UAP	3414/3434	Public Administration*	3
PSCI	3424	State and Local Government*	3
PSCI	3554	Comparative Political Economy*	3
PSCI/UAP	3744	Public Policy Analysis*	3
SOC	2004	Social Problems	3
SOC	3004	Social Inequality*	3
SOC	3204	Social Research Methods*	4
SOC	3504	Population Trends and Issues*	3
SPIA	2554	Collaborative Policy Making and Planning	3
UAP	3014	Urban Policy and Planning*	3
UAP/PSCI	3344	Global Environmental Issues: Interdisciplinary Perspectives	3
UAP	3354	Introduction to Environmental Policy and Planning	3
UAP	4264	Environmental Ethics and Policy	3
UAP	4344	Law of Critical Environmental Areas	3
UAP	4374	Land Use and Environment	3

Leadership and Sustainability Restricted Electives (only 3 credits may be below 2000-level)

ALCE	3014	Leadership Effective for Ag*	3
GEOG	1116	Seeking Sustainability	3
GEOG/NR	4444	Practicing Sustainability	3
LDRS	1015	Exploring Citizen Leadership	3
LDRS	3104	The Dynamics of Leadership	3
LDRS	3304	Elements of Team Leadership*	3
NR	4105	Leadership in Natural Resources* ¹	3
NR	4106	Leadership in Natural Resources* ²	3
SBIO	3004	Sustainable Nature-Based Enterprises	3
SBIO	3454	Society, Sustainable Biomaterials and Energy	3
UAP	4394	Community Renewable Energy Systems*	3

*Course may have prerequisites, corequisites, or other restrictions. Consult Course Catalog for details.

¹ Course is part of the CNRE Leadership Institute, please consult your advisor for registration process.

² Course is part of the CNRE Leadership Institute, please consult your advisor for registration process.

Outdoor Recreation & Tourism Management Restricted Electives

HTM	2454	Travel & Tourism Management	3
HTM	2464	Introduction to Service	3
HTM	3454	Tourism Analysis	3
HTM	3484	Socio-Cultural Impacts of Tourism	3
HTM	4354	Information Technology and Social Media	3
Study Abroad Any study abroad course focusing on human-environment interactions			3-6

Role of Science in Society

HIST/STS	3706	History of Modern Science	3
PHIL	2605	Reason and Revolution in Science	3
PHIL	2606	Reason and Revolution in Science	3
RLCL/STS	2464	Religion and Science	3
STS	1504	Introduction to Science, Technology, and Society	3
STS	2154	Humanities, Technology, and the Life Sciences	3
STS	2454	Science, Technology, and Environment	3
STS	3105	Science and Technology in Modern Society	3
STS	3334	Energy and Society	3

*Some courses may have prerequisites, corequisites, or other restrictions. Consult Course Catalog for details.

IMPORTANT NOTES BELOW

ENVIRONMENTAL CONSERVATION & SOCIETY NOTES

- Satisfactory Progress:** By the end of the semester in which the student has attempted 60 hours (including transfer, advanced placement, advanced standing, and credit by examination), "satisfactory progress" towards a B.S. degree in the College of Natural Resources and Environment will include the following minimum criteria:
 - Having an in-major and overall grade point average of at least 2.0
 - Passing at least 24 semester credits that apply to the Curriculum for Liberal Education (CLE)
 - Passing the following courses, or their equivalents: BIOL 1105, 1106 and 1115, 1116; MATH 1025
- Foreign Language Requirement:** A sequence of two (2) foreign language courses is required for graduation unless two (2) high school credits of the same foreign language or six (6) transfer credit hours of foreign language have been earned. These credits do not count toward graduation. See catalog section on "Graduation Requirements."
- Policy on Student Exchanges:** Studying overseas or at another U.S. university is a wonderful opportunity to enhance your education. However, planning for an exchange should begin at least 9 months prior to leaving. This will allow time to determine what substitutions, if any, will be allowed and time to arrange your schedule at Virginia Tech to ensure that all requirements for graduation are met.
- In-major GPA Computation:** Includes all courses designated as FIW, FREC, GEOG, NR, and SBIO.
- An in-major and overall GPA of 2.0 is required for graduation.
- In accordance with university guidelines, courses satisfying degree core requirements may not be double counted to satisfy other areas of a degree (e.g. CLE).
- Some of the listed courses have prerequisites and some courses must be taken in sequence to satisfy prerequisites. Be sure to consult with the Undergraduate Course Catalog or check with your advisor.