

## Forestry Major

Only Available on the Pullman Campus



**School of the Environment**  
**B.S. in Earth & Environmental Sciences**  
**Advising Sheet • Fall – 2016**

Student Name \_\_\_\_\_

ID# \_\_\_\_\_

Email \_\_\_\_\_

Advisor: \_\_\_\_\_

Academic Coordinators: 509-335-6166 or 509-335-8538; Webster 1227 and 1229

### BASIC REQUIREMENTS:

**45 Credit minimum required (no more than three, three-credit courses within the major)**

First Year Experience (3 credits)	Cr	Term	Offered
Roots of Contemporary Issues (HISTORY 105)	3		F,S,SS
<b>Foundational Competencies (10 cr min.)</b>			
<i>Written Communication</i>			
ENGLISH 101: Intro Writing [WRTG]	3		F,S,SS
<i>Communication</i>			
HD 205 [COMM] or COM 102 [COMM]	3-4		F,S,SS
<i>Quantitative Reasoning</i>			
STAT 212 [QUAN] or MATH 140 [QUAN]	4		F,S,SS
<b>Ways of Knowing (20 credits min.)</b>			
<i>Inquiry in the Social Sciences (3)</i>			
ECONS 101 [SSCI]	3		F,S,SS
<i>Inquiry in the Humanities (3)</i>			
Elective [HUM]	3		F,S,SS
<i>Additional Inquiry (3)</i>			
Elective [ HUM, ARTS or SSCI]	3		F, S, SS
<i>Inquiry in Creative and Professional Arts (3)</i>			
Elective [ARTS]	3		F, S, SS
<i>Inquiry in the Natural Sciences (7 min.)</i>			
BIOLOGY 106 Intro to Organismal [BSCI]	4		F,S, SS
CHEM 101 Intro to Chem [PSCI] <span style="float: right;">OR</span>	4		F,S, SS
CHEM 105 Principles of Chem I [PSCI]			
<b>Integrative &amp; Applied Learn –Included in EES Core</b>			
Global Diversity			
NATRS 312 [DIVR]	0		S
Capstone			
NATRS 454 [M][CAPS]	0		F
<b>Other Required Courses (12 cr.)</b>			
MATH 106 College Algebra	3		F,S,SS
MATH 108 Trigonometry	2		F,S,SS
BIOLOGY 107 Cell Biology & Genetics	4		F,S,SS
SOIL SCI 201 Soil: A Living System [BSCI]	3		F,S,SS

**Writing in the major requirement:** 1) \_\_\_\_\_ 2) \_\_\_\_\_

**Writing Portfolio/Writing Exam**     Yes     No

**2-years of high school foreign language** ( \_\_\_\_\_ )    Yes \_\_\_\_\_  
**or at least 2-semesters at college level (required to graduate)**    Yes \_\_\_\_\_

**Note:** To certify in the major you must have at least 24 credits and a 2.0 cum GPA.

### CHECKLIST:

Basic Requirements (45 Cr.)

EES Common Core (19-23 Cr.)

Forestry Core (42 Cr.)

Professional Electives (10 Cr.)

TOTAL (at last 120 credits with 40 in upper division courses)

### EARTH & ENVIRONMENTAL SCIENCE COMMON CORE REQUIREMENTS: (19-23 Cr.)

Advanced Writing	Cr	Term	Offered
Writing in the Major <sup>2</sup>	-		F,S
<b>Earth Systems</b>			
GEOL 210 Earth's History & Evolution	4		F,S
<b>Water Science</b>			
NATRS 460 Watershed Management <span style="float: right;">OR</span>	3		S
GEOL 315 Water and the Earth <sup>1</sup>	3		S
<b>Ecology</b>			
NATRS 300 Natural Resources Ecology <span style="float: right;">OR</span>	3		F
BIOLOGY 372 General Ecology [M]	4		F,S, SS
<b>Society &amp; Environment</b>			
NATRS 312 Nat Res & Society [DIVR]	3		S
<b>Spatial Analysis</b>			
SOIL SCI 368 Intro to GIS	3		F
<b>Integrated Capstone (UCORE Requirement)</b>			
NATRS 454 [M] [CAPS] Restoration Ecology	3		F
<b>Experiential</b>			
135 hours of advisor approved work experience	0		F,S,SS
<b>OR</b>			
NATRS 479 NRS Management Internship <span style="float: right;">OR</span>	3		F,S,SS
ENVR SCI 495 Undergraduate Internship <span style="float: right;">OR</span>	3		F,S,SS
ENVR SCI 499 Special Problems	3		F, S, SS

*F = Fall; S = Spring; SS = Summer Session;*  
*FAYO = Fall Alt. Yr. Odd; FAYE = Fall Alt. Yr. Even;*  
*SAYO = Spring Alt. Yr. Odd; SAYE = Spring Alt. Yr. Even*

<sup>1</sup>GEOL 315 requires GEOL 101 or 102

<sup>2</sup>Writing in the Major courses completed as part of WECS major – NATRS 454, 446 or 450, and 464.

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<b>FORESTRY MAJOR</b>	
<b>First Year</b>	
<b>First Term</b>	
BIOLOGY 106 [BSCI]	4
ECONS 101 [SSCI]	3
HISTORY 105 [Roots]	3
Humanities [HUM]	3
MATH 106 or electives <sup>1</sup>	3
<b>Second Term</b>	
Arts [ARTS]	3
BIOLOGY 107 [BSCI]	4
CHEM 101 [PSCI] or 105 [PSCI]	4
ENGLISH 101 [WRTG]	3
MATH 108 or electives <sup>1</sup>	2
<b>Second Year</b>	
<b>First Term</b>	
COM 102 [COMM] or HD 205 [COMM]	3-4
ECONS 330	3
NATRS 204	2
NATRS 300 or BIOLOGY 372 [M] <sup>2</sup>	3-4
NATRS 301	3
<b>Second Term</b>	
NATRS 302	3
NATRS 312 [DIVR]	3
STAT 212 [QUAN] or MATH 140 [QUAN]	4
SOIL SCI 201 [BSCI]	3
SOIL SCI 374	3
Complete Writing Portfolio	
<b>Third Year</b>	
<b>First Term</b>	
GEOLOGY 210	4
NATRS 304	4
NATRS 305	3
SOIL SCI 368	3
Foreign Language, if needed <sup>3</sup>	0-4
<b>Second Term</b>	
NATRS 404	3
NATRS 438	3
NATRS 460 or GEOLOGY 315 <sup>4</sup>	3
Professional Elective <sup>5</sup>	3
SOE Experiential Requirement <sup>6</sup>	3
<b>Fourth Year</b>	
<b>First Term</b>	
Additional [HUM, ARTS or SSCI]	3
NATRS 430	3
NATRS 454 [M] [CAPS]	3
NATRS 455	3
Professional Elective <sup>5</sup>	4
Foreign Language, if needed <sup>3</sup>	0-4
<b>Second Term</b>	
NATRS 446 [M] <sup>7</sup> or 450 [M]	3
NATRS 464 [M]	3
NATRS 485	4
SOIL_SCI 468	3
Complete Forestry Core Experiential Milestone <sup>8</sup>	0
<b>Total Hours Minimum</b>	<b>120</b>

<b>FORESTRY CORE COURSES (42 Cr)</b>			
Courses	Cr	Te rm	Offered
NATRS 204 Nat Res Measurements	2		F
NATRS 301 Forest Plants & Ecosystems	3		F
NATRS 302 Arid Land Plants & Ecosystem	3		S
NATRS 304 Forest Measurements	4		F
NATRS 305 Silviculture	3		F
Econ 330 Natural Resource Economics	3		F
Soil Sci 374 Remote Sensing & Airphoto Interpretation	3		S
NATRS 404 Sampling Terrestrial	3		S
NATRS 430 Intro Wildland Fire	3		FAYE
NATRS 438 Nat Res Policy & Law	3		S
NATRS 450 [M] Conservation Biology OR	3		S
NATRS 446 [M] Wildlife Habitat Ecol <sup>5</sup>	3		S
NATRS 455 Elements of Range Mgt	3		F
NATRS 464 Landscape Ecology [M]	3		S
Soil Sci 468 ARCGIS and Spatial Analysis	3		S
NATRS 485 Disturbance Ecology	3		S
<b>Total</b>	<b>42</b>		

**Additional Forestry Core Experiential Milestone**       Yes     No

In addition to meeting the EES Core experiential requirement, Forestry students are required to obtain an additional 135 hours of field or practical work experience.

**Professional Electives - 6 - 11<sup>3</sup> cr. @ 300-400 level**


**FOOTNOTES**

- <sup>1</sup> MATH 106 and 108 are required courses. However, if students have tested into or taken MATH 140, 171, 172 or ALEKS with an 80% or better, MATH 106 and 108 will be waived. If waived, students will take 3-5 additional credits.
- <sup>2</sup> Students have choice of NATRS 300 or BIOLOGY 372 [M].
- <sup>3</sup> Two years of high school foreign language or at least two semesters of college-level foreign language are required by the College of Arts and Sciences for graduation.
- <sup>4</sup> Alternative to NATRS 460 is GEOLOGY 315 which requires an additional prerequisite of GEOLOGY 101 or 102.
- <sup>5</sup> Within the School of the Environment, professional electives are courses selected by the student in concert with their advisor that pertain to their major and/or to a specific sub-discipline of interest. Professional electives may also include courses from outside of their major as needed to complete a minor in another field of study. Approved Professional electives include NATRS 446 [M] or as approved by advisor.
- <sup>6</sup> Certified students in the School of the Environment are required to fulfill the SOE Experiential Requirement before graduation. This requirement is designed to give students experience that they will not receive in the traditional classroom oriented course, and to better prepare them for a successful career after graduation. There are various ways to complete this requirement and students are encouraged to choose an experience of interest to them. Approved courses include ENVR SCI 492, 495, 499 or

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<i>COURSES with Prerequisites</i>	
<b>BIOL 107:</b>	<i>CHEM 101,102,105,106 or concurrent enrollment</i>
<b>BIOL 372:</b>	<i>BIOL 106 and CHEM 102 or 105 (NATRS 300 – has no prereq)</i>
<b>CHEM 101:</b>	<i>Aleks score of 45% or placement/concurrent enrollment into MATH 105, 106, 107, 108, 140, 171, 172.</i>
<b>CHEM 105:</b>	<i>MATH 106 or c// or ALEKS score 70% or higher or MATH 107, 108, 140, 171, 172...</i>
<b>BIOL 372 (F/S/SS)</b>	BIOL 106 and CHEM 102 or 105
Or <b>NATRS 300 (F/S)</b>	No prereq's
<b>NATRS 204 (F)</b>	MATH 106/108 or 108 c// if 106 taken, or 140, 171
<b>NATRS 310 (F)</b>	BIOL 106 and 107
<b>NATRS 301 (F)</b>	NATRS 300 or c//
<b>NATRS 302 (S)</b>	NATRS 301
<b>NATRS 430 (FAYE)</b>	NATRS 301
<b>NATRS 435 (F)</b>	BIOL 372 or NATRS 300 and STAT 212 or 412
<b>NATRS 438 (S)</b>	Junior standing or permission of instructor. Recommended NATRS 312
<b>NATRS 441 (S)</b>	NATRS 300 or BIOL 372 and STAT 212 or 412
<b>NATRS 450 (S)</b>	Junior standing
<b>NATRS 454 (F)</b>	Senior standing
<b>NATRS 455 (F)</b>	BIOL 107
<b>NATRS 460 (S)</b>	Recommended NATRS 204 or sufficient background in spreadsheets
<b>NATRS 464 (S)</b>	Junior standing and recommended Soils 368
<b>STAT 412 (F/S)</b>	STAT 212, MATH 140 or 171
	<ul style="list-style-type: none"> <li>• S = Spring; F = Fall, SS = Summer               <ul style="list-style-type: none"> <li>• c// = concurrent</li> </ul> </li> </ul>
	<p>NATR 479, or another 135 hours as approved by advisor.</p> <p><sup>7</sup> Taking NATRS 446 [M] or an approved NATRS 419, Special Topics with GIS components, are remaining courses that would satisfy the Geospatial minor study. If a student takes NATRS 419 instead of NATRS 446 [M], they would need to complete NATRS 450 [M] to satisfy the [M] course requirement.</p> <p><sup>8</sup> Forestry major students are required to complete the additional Forestry Core experiential milestone of at least 135 hours. This milestone requirement is designed to give students a wider variety of hands-on experience that is valuable to the profession and a successful career after graduation.</p>