

2014-2015 Advising Checklist
 Requirements for the **B.S. Ecology and Conservation Biology: Natural Resource Ecology Option**
 College of Natural Resources

Name: _____ Student ID: _____ Advisor: _____

Course (prerequisite classes)

First Year-Fall Semester	CR	GR	Sem
•CHEM 101 - Intro to CHEM OR 111 Princ of Chem (C or better in CHEM 101 or MATH 143)	4		FS
•^ENGL 102 - College Wrt. and Rhetoric (ENGL 101)	3		FS
COMM 101 - Fund. Of Pub. Speak	2		FS
NR 101 - Exploring Natural Resources	1		F
•MATH 160 - Survey of Calculus (MATH 108, MATH 143)	4		FS
Total Credits	14		

First Year-Spring Semester	CR	GR	Sem
BIOL 115 - Cells & Evolution (CHEM 101 or 111)	4		FS
NR 200 - Seminar	1		S
•^ISEM 101 - Integrated Seminar	3		FS
PHYS 100 - Fund. of Physics and lab OR PHYS 111 Gen. Physics I and lab (MATH 143)	4		S/ FS
^General Education Requirement	3		FS
Total Credits	15		

Second Year-Fall Semester	CR	GR	Sem
BIOL 116 - Organisms/Environ. (BIOL 115)	4		FS
CSS 235 - Society and Nat. Res.	3		F
ECON 202 - Princ. of Microeconomics OR ECON 272 - Found. of Econ. Analysis	3 or 4		F S
SOIL 205/206 (CHEM 101 or CHEM 111)	4		FS
^Elective	1		FS
Total Credits	15-16		

Second Year-Spring Semester	CR	GR	Sem
BIOL 213 - Princ Biol Structure (BIOL 115)	4		S
FOR 221 - Ecology (BIOL 102/102L, 115, 116, or PLSC 205; or Perm)	3		S F
FOR 375 - Intro to Spatial Analysis (College Algebra)	3		FS
STAT 251 - Statistical Methods (MATH 108)	3		FS
^General Education Requirement	3		FS
Total Credits	16		

Third Year-Fall Semester	CR	GR	Sem
FOR 330 - Forest & Soil Canopy Proc (SOIL 205, MATH 143, PHYS 100 and FOR 221 or REM 221)	4		F
Restricted Elective	3		FS
Restricted Elective	3		FS
Restricted Elective	3		FS
^General Education Requirement	3		FS
^ISEM 301 - Great Issues	1		FS
Total Credits	17		

Third Year-Spring Semester	CR	GR	Sem
CSS 383 - NR Economics (FOR 235 or CSS 235; and ECON 202 or ECON 272; and MATH 143)	3		S
WLF 316 - Wildlife Ecology II (WLF 314 and 315 with a c or better) OR FISH 316 - Princ. of Pop. Dynam. (FISH 314 and FISH 315 with a grade of 'C' or better and FOR 221, REM 221, or BIOL 314; or Permission)	4 or 2		S
ENGL 317 - Technical Writing (ENGL 102)	3		FS
*FOR 497 - Senior Thesis (Cum. GPA of at least 3.2, completion > 90 credits, and perm. of faculty mentor)	1		FS
FOR 320- Dendrology (Prereq or Coreq: BIOL 116 or PISc 205) OR REM 341-Sys. Botany (BIOL 115; and BIOL 213 or PISc 205)	4 or 3		S
Total Credits	12-15		

Fourth Year-Fall Semester	CR	GR	Sem
FOR 497 - Senior Thesis (Cum. GPA of at least 3.2, completion > 90 credits, and perm. of faculty mentor)	2		F
Restricted Elective	3		FS
Restricted Elective	3		FS
Restricted Elective	3		FS
Restricted Elective	3		FS
Restricted Elective	2		FS
Total Credits	16		

Fourth Year-Spring Semester	CR	GR	Sem
REM 429 - Landscape Ecology (FOR 221 or REM 221)	3		S
FOR 483 - Senior Project Presentation	1		S
Restricted Elective	3		FS
Restricted Elective	3		FS
Restricted Electives	3		FS
Restricted Electives	3		FS
Total Credits	16		

To graduate in this option, students must achieve a "C" or better in the following six courses: NR 200, FOR 330, REM 429, SOIL 205, SOIL 206, and WLF or FISH 316. 120 total credits are required for this degree.

*Before students are allowed to begin their senior thesis or project (485 or 497), they must attend two evening thesis / project sessions and one senior poster presentation
 •Recommended semester for this course
 ^General Education Requirements: 18-credit minimum

Students pursuing this option must receive a grade of C or better in each of the following four indicator courses to graduate with a B.S. in Ecology and Conservation Biology: BIOL 116, BIOL 213, STAT 251, and FOR/REM 221.

Indicator Courses	CR	GR	Sem
BIOL 116	4		FS
BIOL 213	4		S
STAT 251	3		FS
FOR/REM 221	3		FS

2014-2015 Restricted Electives for ECB - Natural Resource Ecology option			
Quantitative Resource Analysis Restricted Electives (choose one)	CR	GR	Sem
CSS 310 - Social Research Methods in Conservation (STAT 251)	4		F
FOR/REM 472 - Remote Sensing of the Environment	4		F
*REM 410 - Principles of Vegetation Measurement and Assessment	2		F
*REM 411 - Ecological Monitoring and Analysis (STAT 251 or Permission; Prereq or Coreq: REM 410)	2		FS
GEOG 385 - GIS Primer (Basic knowledge of PC-based operating system)	3		FS
STAT 431 - Statistical Analysis (STAT 251, STAT 301, or STAT 416)	3		FS
STAT 422 - Sample Survey Methods (STAT 251 or STAT 301)	3		FS
WLF 448 - Fish & Wildlife Population Ecology (STAT 251; and FISH 316, WLF 316, or course in vertebrate ecology)	4		F
Resource Management Restricted Electives (choose one)	CR	GR	Sem
CSS 385 - Conservation Management & Planning I (Junior or Senior standing)	4		F
CSS 490 - Wilderness and Protected Area Management	3		S Alt yr
CSS 496 - Monitoring Impacts in Protected Areas and Wilderness	3		S Alt yr
FISH 418 - Fish Management (FISH 314, BIOL 481, STAT 251)	4		F
FOR 424 - Forest Dynamics and Management (Senior standing and FOR 274, FOR 320, FOR 324 and FOR 330)	4		F
FOR 462 - Watershed Science and Management (MATH 143; and PHYS 100 or PHYS 111)	3		F
REM 456 - Integrated Rangeland Management (ENGL 313 or ENGL 317)	3		S
WLF 492 - Wildlife Management (WLF 316 and WLF 448; Prereq or Coreq: WLF 482, BIOL 481 or BIOL 483)	4		S
Ecology Rest. Electives 10 credits, at least 2 cr. from Fish 315, 415 or 430, REM 460, and/or Wlf 315	CR	GR	Sem
BIOL 421 - Advanced Evolutionary Biology (BIOL 314, FOR 221 or REM 221)	3		F
BIOL 478 - Animal Behavior (BIOL 115 and 116)	3		S
ENT 469 - Introduction to Forest Insects	2		FS
ENT 472 - Aquatic Entomology	3		S Alt yr
FISH 314 - Fish Ecology (FOR 221, REM 221, or BIOL 314)	3		F
FISH 315 - Fish Ecology lab (FOR 221, REM 221, or BIOL 314)	1		F
FISH 415 - Limnology (STAT 251 and FOR 221, REM 221, or BIOL 314)	4		F
FISH 430 - Riparian Ecology and Management (FOR 221, REM 221, or BIOL 314)	3		S
FOR 326 - Fire Ecology and Management (FOR 221 or REM 221)	3		F
FOR 468 - Forest and Plant Pathology (FOR 320 and FOR 330)	2		S
GEOG 410 - Biogeography (GEOG 100/GEOG 100L or Permission)	3		FS
GEOG/REM 450 - Global Environmental Change (MATH 143 or STAT 251)	3		FS
MMBB 425 - Microbial Ecology (Recommended Preparation: MMBB 250, MATH 137 or 143)	3		S Alt yr
PLSC 410 - Invasive Plant Biology	3		Alt yr
REM 440 - Wildland Restoration Ecology (FOR 221, or REM 221, or equivalent general ecology course)	3		S
REM 459 - Rangeland Ecology (WWW) (Recom. Prep is REM 221, ENGL 317, REM 411 or FOR 274 or Perm.)	2		F
REM 460 - Integrating GIS and Field Studies in Rangelands (Coreq: REM 459)	2		F
WLF 314 - Wildlife Ecology I (FOR 221, REM 221, or BIOL 314)	3		F
WLF 315 - Wildlife Ecology I lab (Prereq or Coreq: WLF 314)	1		F
WLF 440 - Conservation Biology (FOR 221, REM 221, or BIOL 314 or Permission)	3		F
Social Science/Political Science Electives (choose one)	CR	GR	Sem
COMM 410 - Conflict management (Recommended Preparation: COMM 233)	3		FS
CSS 387 - Environmental Communication Skills (CSS 287 or Permission)	3		S
CSS 489 - Personalities and Philosophies in Conservation	3		S
CSS 492- Ecotourism Principles and Issues (CSS 287 or equivalent)	3		S
FOR 484 - Forest Policy and Administration (Junior standing)	2		FS
CSS 493 - International Land Pres./Cons Systems	3		S
GEOG 420 - Land, Resources, Environment	3		S
HIST 424 - American Environmental History	3		S
PHIL 452 - Environmental Philosophy	3		F
CSS/POLS 364 - Politics of the Environment	3		F

*Note: **Both** REM 410 and REM 411 must be completed to satisfy Quantitative Resource Analysis Restricted Elective Requirement.

