# ECOLOGY AND CONSERVATION BIOLOGY

# NATURAL RESOURCE ECOLOGY OPTION

2011 - 2012 Advising Checklist
Requirements for degree (BS) in Ecology and Conservation Biology – Natural Resource Ecology option

### **College of Natural Resources**

NAMECOLLEGE TRANSFERRED FROM	ADVISOR			
COLLEGE TRANSFERRED FROM	YEAR STARTED UI			

Course		Title (prerequisite)	CR	Sem	GR	Course		Title (prerequisite)	CR	Sem	GR
		FIRST YEAR						THIRD YEAR			
NR	101	Exploring Natural Resources	1	F		Engl	317	Technical Writing (Engl 102, junior status or perm.)	3	F/S	
NR	200	Seminar (permission)	1	S		For**	330	Forest Ecosystem Processes (Soil 205/206, Math 143 or 160, Phys 100 or 111)	3	F	
Chem	101	Intro. To Chemistry I				For	383	Econ/Nat Res Mgrs (Econ 202,Math	3		
		OR	4	F/S		CSS	383	160,For 235) OR  Res. Econ/Nat Res Mgrs (Econ 201 or 202) OR	3	F/S	
Chem	111	Principles of Chemistry I (scores or Math 143)				Econ	385	Environmental Econ (Econ 202 or 272 or perm)			
Biol	115	Cells & Evol. Of Life (co-or pre-req Chem 101 or Chem 111)	4	F/S		Fish**	316	Princ / Pop.Dynamics (For/REM 221) Or	2	S	
						Wlf**	316	Wildlife Ecol II (Wif 314 and 315)	4	S	
Comm	101	Fundamentals of Public Speaking	2	F/S							
Engl	102	College Writing & Rhetoric	3	F/S							
Math	160	Survey of Calculus (Scores or Math 143) OR	4	F/S		REM	341	Systematic Botany (Biol 115 & 116) OR	3	S	
Math	170	Analytic Geom./Calculus (Scores or Math 143)	•	1,5		For	320	Dendrology (Biol 116 or perm)	4	S	
Soil **	205/ 206	General Soils & Lab (Chem 101 or 111)	3/1	F/S							
	200	SECOND YEAR		<u> </u>				FOURTH YEAR		<u> </u>	II.
Biol*	116	Organisms & Environ. (Chem 101, Biol 115)	4	F/S		#					
Biol*	213	Princ. of Biol Structure/Function (Biol 115, Biol 116)	4	S		OGG/	405				
Econ	202	Principles of Economics (Micro) OR	3	F/S		CSS/ Fish/	485	Ecol. & Cons. Biol Project	1/2	F/S	
Econ	272	Foundations of Economics	4	1,5		For/	OR				
For/ CSS	235	Society and Natural Resources	3	F/S		NR/ REM/	497	Senior Thesis	1/2	F/S	
Stat*	251	Statistical Methods (Math 137, 143, or 160)	3	F/S		Wlf					
For */ REM *	221	Ecology (Biol 115 or 116, 213 recommended)	3	F/S							
Phys	100	Fundamentals of Physics and lab OR	3/1	S			483	Senior Project Presentation	1	F/S	
Phys	111	General Physics I and lab (Math 143)	3/1	F/S							
<b>3</b>						REM**	429	Landscape Ecology of Forests and Rangelands For/REM 221)	3	S	
Social Sc	ience/P	olitical Science Restricted Elective -1	course	(see bac	k)						
						Quantita	source Analysis Restricted Elective	res – 2 c	courses		
Resource	Mana	gement Restricted Elective -1 course (s	see bac	<b>k</b> )							
Ecology	 Restric	ted Electives – 3 courses minimum 10	credits	(see bac	(k)	COURSE	S FOR	UNIVERSITY OF STATE BOA	RD CC	) PRE	<u> </u>
						ISEM	101	Integrated Seminar	3	F/S	
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Students pursuing a B.S. in Ecology & Conservation Biology must receive a grade of C or better in each of	the following 4 indicator courses to	
register in upper division courses in Fish/For/REM/CSS/Wlf and to graduate with a B.S. in either option:	Biol 116	_
To graduate, a student must also achieve a C or better in each of these core ECB courses: NR 200,	Biol 213	
Soils 205/206, Fish 316 or Wlf 316, For 330, For/REM 429		
	Stat 251	
Before students are allowed to begin their senior thesis or project (497 or 485), they must attend two		
evening thesis/project sessions and one senior poster session	For/REM 221	

# 2011 2012 ADVISING CHECKLIST – NATURAL RESOURCE ECOLOGY OPTION

Course		2011 2012 ADVISING CHECKLIST – NATURAL RESOURCE ECOLOGY OPTIO		Sem/Yr.	GR
	E MANI	Title (prerequisites) AGEMENT RESTRICTED ELECTIVES (choose one course):	CR	Sem/Yr.	GK
CSS	385	Conservation Management & Planning I (junior or senior standing)	4	F	
CSS	490	Wilderness and Protected Area Mgmt.  Offered alternate years / Spring	3	S	
CSS	496	Monitoring Impacts in Protected Areas and Wilderness  Offered alternate years / Spring  Offered alternate years / Spring	3	S	
Fish	418	Fisheries Management (Fish 314, Biol 481, Stat 251)	4	F	
For	_		4	F	
	424	Forest Dynamics and Management (Sr. standing, For 274, 320, 324, and 330)		F	
For	462	Watershed Science and Management (Math 43 or 160, H.S. physics or Phys 100 or 111)	3		
REM	454	Invasive Plant Management (recommended prep: PISc 338) Offered alternate years / Spring	3	S	
REM	456	Integrated Rangeland Management (recommended prep.: REM 251)	3	S	
Wlf	492	Wildlife Management pre-req: Wlf 316, Wlf 448; Pre-or co-req: Biol 481, 483 or Wlf 482	4	S	
OUANTITA	TIVE	RESOURCE ANALYSIS RESTRICTED ELECTIVES (choose two courses):			
CSS	310	Social Research Methods in Conservation (Stat 251)	4	F	
For	375	Introduction to Spatial Analysis for Natural Resource Management (college algebra)	3	S	
For/REM	472	Remote Sensing of the Environment (recommended prep: Phys 100 or Phys 112)	3-4	F	
For	474	Forest Inventory (recommended prep: For 324 and 424; pre-req.: For 274 and Stat 251)	3	S	
Geog	385	GIS Primer (pre-req.: basic knowledge of PC-based operating system)	3	F/S	
REM	357		3	F	
		Rangeland and Riparian Habitat Assessment (recommended prep: basic statistics course)			
Stat	401	Statistical Analysis (Stat 251, 271, or 301)	3	F/S	
Stat	422	Sampling Methods (Stat 251, 271, or 301)  Offered through EO in Spring	3	F/S	
Wlf	448	Fish & Wildlife Population Ecology (Stat 251; and Fish or Wlf 316 or course in vertebrate	4	F	
		ecology)			
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		RICTED ELECTIVES (choose 3 courses – minimum 10 credits, 2 credits of which must be asterisked*** co		a	T
Biol	421	Advanced Evolution/Pop. Dynamics (recom. prep: genetics; pre-req: Biol 314, For/REM 221	3	S	
Biol	478	,	3	S	ļ
Ent	472	Aquatic Entomology Offered alternate years / Spring	3	S	
Fish	314	Fish Ecology (For or REM 221 or Biol 314)	3	F	
Fish***	315	Fish Ecology lab (For or REM 221 or Biol 314; co-req Fish 314)	1	F	
Fish***	415	Limnology (For or REM 221, Stat 251)	4	F	
Fish***	430	Riparian Ecology and Management (For or REM 221 or Biol 314)	3	S	
For***	423	Forest Community Ecology (For or REM 221 or Biol 314) – graded P/F Check for when offered	1		
For	426		3	F	
For***	463	Hydrologic Measurement Techniques (co-req: CE 325/BAE 355, BAE 350, or For 462)	1	F	
For	468		2	S	
For	469	Introduction to Forest Insects (For or REM 221 or Biol 314)	2	S	
Geog	310		2-3	S	
Geog-	450	Global Environmental Change (Math 143 or Stat 251)	3	S	
REM	130	Global Environmental Change (Watter 113 of State 231)	3	S	
MMBB	425	Microbial Ecology (recom prep.: MMBB 250, Math 137 or 143) Offered alternate years / Spring	3	S	
PlSc	410	Biology of Weeds  Offered alternate years / Fall	3	F	
REM	440	Wildland Restoration Ecology (recommended prep.: a general ecology course)	3	S	
REM	_	Rangeland Ecology (www only; recommended prep.: a general ecology course)	2	F	
	459				1
REM***	460	Rangeland Ecology Current Topics & Field Studies (co-req.: REM 459)	1	F	<u> </u>
Wlf	314		3	F	<u> </u>
Wlf***	315	Wildlife Ecology I Laboratory (co-req.: Wlf 314)	1	F	1
Wlf	440	Conservation Biology (For or REM 221 or Biol 314)	3	F	<u> </u>
SOCIAL SO	CIENCE	/POLITICAL SCIENCE RESTRICTED ELECTIVES (choose one course):			
Comm	410	Conflict Management	3	F/S	
CSS	387	Environmental Communication Skills (CSS 287 or permission)	3	S	<b>†</b>
CSS	481	Conservation Leadership (For/CSS 235, CSS 287)	3	F	
CSS	489	Personalities and Philosophies in Conservation	2	S	<del>                                     </del>
CSS	_	•	3	S	
	493	International Land Preservation and Conservation Systems (Alternate Years)			-
For	484	Forest Policy and Administration	2	S	<u> </u>
Hist	424	American Environmental History Check for when offered	3		<u> </u>
Phil	382	Philosophy of Ecology Check for when offered	3		1
Phil	452	Environmental Philosophy (offered www in summer)	3	F	
Phil	457	Natural Resource Ethics Check for when offered	3		
PolS/CSS	364	Politics of the Environment	3	F	1