UF Wildlife Ecology and Conservation Major
Model 8-Semester Advising Sheet
Specialization: Wildlife Ecology & Conservation
Lower Division Curriculum: Semesters 1-4

Semester 1, Fall			
Course Number	**Title of Course**	**Credits**	**Prerequisites**
BSC 2010 & 2010L	**Integrated Principles of Biology I and Lab (Gen Ed-Biological Sciences)** ***Critical Tracking Course***	**4**	
WIS 2920	**Wildlife Colloquium** **Students must earn a minimum grade of C within two attempts.**	1	
	State Core Gen Ed Composition; WR 6,000 words	3	
	State Core Gen Ed Humanities	3	
	Elective	2	
		Total = 13	
Semester 2, Spring			
Course Number	**Title of Course**	**Credits**	**Prerequisites**
UF Requirement	**Quest 1 (Gen Ed-Humanities)**	**3**	
ECO 2023 or **AEB 2014 or** **AEB 3103** **(Choose One)**	**Principles of Microeconomics or** **Economic Issues, Food and You or** **Principles of Food and Resource Economics** **(All are Gen Ed-Social and Behavioral Sciences)** ***Critical Tracking Course-choose 1***	**3-4**	
BSC 2011 & 2011L	**Integrated Principles of Biology II and Lab (Gen Ed-Biological Sciences)** ***Critical Tracking Course***	**4**	**BSC 2010 & 2010L**
STA 2023	**Introduction to Statistics 1 (State Core Gen Ed-Mathematics)** ***Critical Tracking Course***	**3**	
	State Core Gen Ed Social and Behavioral Sciences	3	
		Total = 16-17	
Semester 3, Fall			
Course Number	**Title of Course**	**Credits**	**Prerequisites**
CALS Requirement: **AEC 3030C**	**Effective Oral Communication** Note: SPC 2608 will substitute	**3**	
CALS Requirement: **AEC 3033C**	Writing for Agricultural and Natural Resources *(WR 6,000 words)* Note: ENC 2210 or ENC 3254 will substitute	**3**	
CHM 2045 & 2045L	**General Chemistry I and Lab (State Core Gen Ed-Biological and Physical Sciences)** ***Critical Tracking Course***	**4**	**MAC 1147 *and* ALEKS of 76%**
	Ecology Common Requirement, see page 3	3-4	
	Gen Ed-Composition; WR 6,000 words	3	
		Total = 16-17	
Semester 4, Spring			
Course Number	**Title of Course**	**Credits**	**Prerequisites**
UF Requirement	**Quest 2 (Gen Ed-Social and Behavioral Sciences)**	**3**	
MAC 2311	**Analytic Geometry and Calculus I (Gen Ed-Mathematics)** ***Critical Tracking Course***	**4**	**Student must take ALEKS Assessment on One.UF**
SWS 3022 & 3022L	**Introduction to Soils in the Environment and Lab (Gen Ed-Physical Sciences)** **Students must earn a minimum grade of C within two attempts.** *Taught Fall, Spring and Summer Semesters*	4	
WIS 3402 & 3402L	**Wildlife of Florida and Lab** **Students must earn a minimum grade of C within two attempts.** *Taught Spring Semester Only*	4	
		Total = 15	

UF Wildlife Ecology and Conservation Major
Model 8-Semester Advising Sheet
Specialization: Wildlife Ecology & Conservation
Upper Division Curriculum: Semesters 5-8

Semester 5, Fall			
Course Number	**Title of Course**	**Credits**	**Prerequisites**
WIS 3401	**Wildlife Ecology and Management** ***Critical Tracking Course*** **Students must earn a minimum grade of C within two attempts.** *Taught Fall and Spring Semesters*	3	**BSC 2011 & 2011L**
WIS 4945	**Wildlife Techniques** **Students must earn a minimum grade of C within two attempts.** *Taught Fall and Spring Semesters* **OR GIS Common Requirement**, see page 3	3	**WIS 3402**
	Plant Diversity and Taxonomy Common Requirement 1, see page 3	3	
	Wildlife Biology Common Requirement, see page 3 **or Focus Course**	3-4	
	Invertebrate Biology Common Requirement, see page 3	3-4	
		Total = 15-18	
Semester 6, Spring			
Course Number	**Title of Course**	**Credits**	**Prerequisites**
WIS 3553C	**Introduction to Conservation Genetics** ***Critical Tracking Course*** **Students must earn a minimum grade of C within two attempts.** *Taught Spring Semester Only*	4	**STA 2023 & Ecology**
WIS 4945	**Wildlife Techniques** **Students must earn a minimum grade of C within two attempts.** *Taught Fall and spring Semesters* **OR GIS Common Requirement**, see page 3.	3	**WIS 3402**
	Plant Diversity and Taxonomy Common Requirement 2, see page 3	3	
	Wildlife Biology Common Requirement, see page 3 **or Focus Course**	3-4	
		Total = 13-15	
Summer A			
Course Number	**Title of Course**	**Credits**	**Prerequisites**
WIS 4945L	***Wildlife Techniques Lab*** **Students must earn a minimum grade of C within two attempts.**	1	**WIS 4945 & WIS 3402**
		Total = 1	
Semester 7, Fall			
Course Number	**Title of Course**	**Credits**	**Prerequisites**
WIS 4601C	**Quantitative Wildlife Ecology** ***Critical Tracking Course*** **Students must earn a minimum grade of C within two attempts.** *Taught Fall and Spring Semesters* ***Note: WIS 4601C should be taken prior to WIS 4501***	3	**STA 2023 & WIS 3401**
	Conservation Common Requirement, see page 3 **or Focus Course**	3	
	Human Dimensions Common Requirement, see page 3	3	
	Natural Resource Policy Common Requirement, see page 3	3	
	Focus Course or Elective	3-4	
		Total = 15-16	

Semester 8, Spring			
Course Number	**Title of Course**	**Credits**	**Prerequisites**
WIS 4501	**Introduction to Wildlife Population Ecology** ***Critical Tracking Course*** **Students must earn a minimum grade of C within two attempts.** *Taught Fall and Spring Semesters* ***Note: WIS 4501 should be taken after WIS 4601C***	3	**WIS 3401, Ecology & Genetics**
	Conservation Common Requirement, see page 3 **or** **Focus Course**	3-4	
	Elective **or Focus Course**	3	
	Focus Course	3	
	Elective	3	
		Total = 15-16	

WEC Common Requirements – All Wildlife majors, except Pre-Professional, will select courses from each of these 8 categories of common course requirements. Total common requirements taken will equal a minimum of 9 courses totaling at least or more than 27 credit hours:

Invertebrate Biology Common Requirement (choose 1):

Course Number and Title	Credits	Semester
ENY 3005/3005L Principles of Entomology and Lab	3	Fall, Spring, Summer C
ENY 4210 Insects and Wildlife	3	Fall
ZOO 4205C Invertebrate Biodiversity	4	Spring

Ecology Common Requirement (choose 1):

Course Number and Title	Credits	Semester
FNR 3500C Forest Ecology	3	Fall & Spring
PCB 3601C Plant Ecology	3	Summer C
PCB 4043C General Ecology	4	Fall & Summer C
WIS 3404 Natural Resource Ecology	3	Fall – online course

Geographic Information Common Requirement (choose 1):

Course Number and Title	Credits	Semester
FNR 3400C- Forest Resources Information Systems	3	Summer B
URP 4273 - Survey of Planning Information Systems	3	Fall
GIS 3072C Geographic Information Systems & Lab	3	Fall
GIS 3043 - Foundations of Geographic Information Systems	4	Fall, Spring, Summer B

Plant Diversity & Taxonomy Common Requirement (choose 2):

Course Number and Title	Credits	Semester
BOT 2011C Plant Diversity	4	Spring
BOT 2710C Practical Plant Taxonomy*	3	Fall
BOT 3151C Local Flora of North Florida*	3	Fall & Spring
FNR 3131C Dendrology/Forest Plants*	3	Fall
ORH 3513C Environmental Plant Identification and Use	3	Fall & Summer C

*Students must take one of the three highlighted courses and then another plant diversity course.

Vertebrate/Wildlife Biology Common Requirement (choose 1):

Course Number and Title	Credits	Semester
ZOO 4307C Vertebrate Biodiversity	4	Fall
WIS 4424 Large Mammal Ecology and Management	3	Spring in even years
ZOO 4472C Avian Biology	4	Spring
ZOO 4962C Herpetology	3	Spring
ANT 3555 or WIS 4934 The Primates	3	Fall
WIS 4934 Conservation of Amphibians and Reptiles	3	Fall in even years
WIS 4934 Invasion/Ecology of Amphibians and Reptiles	3	Fall in odd years

Human Dimensions Common Requirement (choose 1):

Course Number and Title	Credits	Semester
FNR 4070C - Environmental Education Program	3	Fall in odd years
FNR 3602 - Society and Natural Resources	3	Spring
WIS 4551 Diverse Perspectives in Conservation	3	Spring
FNR 4080 - Sustainable Ecotourism Development	3	Fall
WIS 4523 - Human Dimension of Natural Resource Conservation	3	Fall

Economics/Natural Resource Policy Common Requirement (choose 1):

Course Number and Title	Credits	Semester
ECP 3302 - Environmental Economics & Resource Policy	4	Fall & Summer A
FNR 4660 Natural Resource Policy & Economics	3	Fall & Spring (Spring limited seats)

Conservation Common Requirement (choose 1):

Course Number and Title	Credits	Semester
WIS 4554 - Conservation Biology	3	Fall
WIS 4203C - Landscape Ecology & Conservation	3	Spring

Approved Ecology Focus Area course options:*

Course Number and Title	Credits	Semester/Pre-Requisites/Notes
ALS 4161 Exotic Species and Biosecurity Issues	3	Fall; BSC 2011/2011L
ALS 4162 Consequences of Biological Invasions	3	Spring; BSC 2011/2011L
ANT 3555 The Primates	3	Fall
ANT 4552 Primate Behavior	3	Spring
ANT 4930 Primate Conservation	3	Spring
ANT 4930 Primate Ecology	3	Spring
BSC 2862 Global Change Ecology and Sustainability	3	Fall & Spring
BSC 3307C Climate Change Biology	4	Fall & Spring; BSC 2011/2011L
BSC 4821C Evolutionary Biogeography	3	Fall
ENY 4161 Insect Classification	3	Fall, Spring & Summer C; ENY 3005/3005L
ENY 4208 Ecology and Conservation of Pollinators	3	Fall; BSC2010/2010L & Junior Standing
ENY 4201/4201L Insect Ecology & Lab	3	Fall; ENY 3005L or BSC 2005L or equivalent
ENY 4202 Ecology of Vector Borne Disease	2	Fall; BSC 2010
ENY 4905 Problems in Entomology		
GLY 6075 Global Climate Change	3	Fall; **Graduate level**, graduate fees apply, instructor permission needed
FAS 4175 Algae Biology and Ecology	3	Spring; BSC 2011/2011L
FAS 4270 Marine Ecological Processes	3	Fall; BSC 2010/2010L
FAS 4105C Field Ecology of Aquatic Organisms	3	Summer A; Only 7 seats available for course
FAS 4271C Invasion Ecology of Aquatic Animals	3	Spring in Even years
FAS 4202C Biology of Fishes	4	Fall; BSC 2011/2011L
FAS 4305C Introduction to Fishery Science	3	Spring
FAS 6337C Fish Population Dynamics	3	Fall in even years; **Graduate level**, graduate fees apply, instructor permission needed
MCB 3020/3020L Basic Biology of Microorganisms	4	Fall, Spring, Summer A & Summer B
PCB 3601C Plant Ecology	3	Spring; Introductory college biology or botany
PCB 4043C General Ecology	4	Fall & Summer C; BSC 2011/2011L
PCB 4674 Evolution	4	Fall & Spring; BSC 2011/2011L; one semester of calculus; PCB 3063 recommended
PCB 4460 Marine Ecology (Semester of Immersion: Semester of Immersion - Biology	3	Spring in even years; BSC 2011/2011L
SWS 4180 Earth System Analysis	3	Fall; MAC 2233 or PHY 2048
VME4012 Aquatic Animal Conservation Issues	3	Fall; Only one VME can be used as a Focus course
VME 4013 Aquatic Wildlife Health Issues	3	Fall; Only one VME can be used as a Focus course
VME 4016 Manatee Health & Conservation	3	Summer C; Only one VME can be used as a Focus course
WIS 3410 The Ecology of Climate Change	3	Spring
WIS 4570C Wildlife Behavior and Conservation	3	Fall; BSC 2010
WIS 4547C Avian Field Techniques	2	Spring
WIS 4551 Diverse Perspectives in Conservation	3	Spring
WIS 4905 Individual Problems	Varying	Fall, Spring, Summer C
WIS 4941 Internship in Wildlife Ecology and Conservation	Varying	Fall, Spring, Summer C, as approved by Dr. Christina Romagosa
WIS 4934 Zoo Management and Conservation	3	Fall
WIS 4934 Conservation of Amphibians and Reptiles	3	Fall in even years
WIS 4934 Invasion/Ecology of Amphibians and Reptiles	3	Fall in odd years
WIS 4934 Wildlife Tracks and Signs	3	Fall
WIS 4934 Disease and Wildlife	3	Fall
ZOO 3603C Evolutionary Developmental Biology	4	Fall; BSC 2011/2011L
ZOO 4050 Animal Behavior	3	Spring
ZOO 4307C Vertebrate Biodiversity	4	Fall; BSC 2011 and BSC 2011L OR ISC 2410L
ZOO 4403C Marine Biology	3	Fall & Summer C; BSC 2011/2011L
ZOO 4405 Sea Turtle Biology and Conservation	3	Spring
ZOO 4485 Marine Mammal Biology	3	Spring
ZOO 4926 Special Topics in Zoology	3	TBA
WIS 4934 Everglades Natural History, Mgt, and Restoration	3	Spring

Other 3,000 level or above courses may count for this requirement as approved by Dr. Christina Romagosa, Undergraduate Coordinator.

Approved Management Focus Area course options:*

Note: Grouped management courses into categories by content. You may mix and match from all categories to develop your 12 credit Focus Plan.

Course Number and Title	Credits	Semester/Notes
FAS 4305C Introduction to Fishery Science	3	Spring
FAS 4932 Science Diver	2	Fall/Spring
Law, Economics and Policy		
AEB 2451 Economics of Resource Use	3	Fall/Spring
AEB 3450 Introduction to National Resource and Environmental Economics	3	Fall; AEB 3103 or ECO 2023 pre-req; Can't receive credit for both AEB 3450 and ECP 3302
ECP 3302 Environmental Economics and Resource Policy	4	Fall & Summer A; ECO 2023; Can't receive credit for both ECP 3302 and AEB 3450 Note: Not if used for Economics Common Requirement
FNR 4660 Natural Resource Policy and Economics	3	Fall; Note: Not if used for Economics Common Requirement
FNR 3002C Foundations of Natural Resource and Conservation	3	Summer B; 3FY or instructor consent
FNR4510 Global Forests	3	Spring; 4FY pre-req
FNR 4304C Urban Forestry	3	Spring; 4FY pre-req
FNR 4621 Forest Economics and Management	4	Fall; FNR 3003C and ECO 2023 pre-reqs
Planning and Design		
FNR 4623C Integrated Natural Resource Mgt	3	Spring; FNR 3003C pre-req
FNR 4010 Ecology and Restoration of Longleaf Pines Ecosystems	3	Fall/Spring; General Ecology course
FNR 4620C Forest Health Management	3	Spring; 4F pre-req
SWS 4244 Wetlands	3	Fall
SWS 4207 Sustainable Agricultural and Urban Land Mgt	3	Fall
WIS 4203C Landscape Ecology and Conservation		Spring; STA 2023 & general ecology course & general GIS course Note: Not if used for Conservation Common Requirement
Implementation Procedures		
ALS 4161 Exotic Species and Biosecurity Issues	3	Fall; BSC 2010/201L & BSC 2011/2011L
FNR 3131C Dendrology/Forest Plants	3	Fall; Note: Not if used for Plant Diversity Common Requirement
FNR 3410C Natural Resource Sampling	3	Fall; STA 2023 pre-req
FNR 4343C Forest Water Resources	3	Spring; SWS 3022/3022L pre-req
FNR 3003C Silviculture	4	Spring; FNR 3500C pre-req
FNR 3622 Fire Ecology and Mgt	2	Spring; FNR 3500C, PCB 3034C or PCB 4042C pre-reqs
FNR 3622L Fire Ecology and Mgt Lab	1	Spring; FNR 3622
FNR 3133C Tree Biology	3	Fall; BOT 2010C or BSC 2011 pre-reqs
FNR 3411 Forest Mensuration	3	Spring; FNR 3410C pre-req
FNR 3400C Forest Resources Information Systems	3	Summer B
GIS 3043 Foundations of Geographical Information Systems	3	Fall, Spring, Summer A & Summer B; Sophomore Standing Note: Not if used for GIS Common Requirement
GIS 3072C Geographic Information Systems	3	Fall; Junior Standing
Any SUR prefix 3000-level or higher		TBD
URP 4273 Survey of Planning Information Systems	3	Fall; Junior Standing
WIS courses with appropriate Management Focus		
WIS 4427C Wildlife Habitat Management	**3**	**Mandatory course** **Spring Only; WIS 3401 Pre-req**
WIS 4551 Diverse Perspectives in Conservation	3	Spring; Note: Not if used for HD Common Requirement
WIS 4570C Wildlife Behavior and Conservation	3	Fall; BSC 2010 pre-req
WIS 4934 Large Mammal Ecology and Mgt	3	Spring in even years; Note: Not if used for Vertebrate Common Requirement
WIS 4934 Everglades Natural History, Mgt, and Restoration	3	Spring
WIS 4905 Individual Problems	Varying	Every semester by contract only
WIS 4941 Internship in Wildlife Ecology and Conservation	Varying	Every semester by contract only

Other 3,000 level or above courses may count for this requirement as approved by Dr. Christina Romagosa, Undergraduate Coordinator.

Approved Human Dimension Focus Area course options:*

Note: Grouped Human Dimension courses into categories by content. You may mix and match from all categories to develop your 12 credit Focus Plan.

Policy, Economics and Ethics		
Course Number and Title	**Credits**	**Semester/Notes**
AEB 2451 Economics of Resource Use	3	Fall/Spring
AEB 3450 Intro to Natural Resource and Environmental Economics	3	Fall; AEB 3103 or ECO 2023 pre-req; Can't receive credit for both AEB 3450 and ECP 3302
AEB 4126 Agricultural and Natural Resource Ethics	3	Fall, Spring & Summer B; Junior Standing
AEB 4283 International Development Policy	3	Fall & Spring; ECO2023 pre-req
ECP 3302 Environmental Economics and Resource Policy	3	Fall & Summer A; AEB 3103 or ECO 2023 pre-req; Can't receive credit for both AEB 3450 and ECP 3302. Note: Not if used for Economics Common Requirement
FNR 4660 Natural Resource Policy and Administration	3	Fall; Note: Not if used for Economics Common Requirement
FNR 3602 Society and Natural Resources	3	Spring Note: Not if used for HD Common Requirement
GEA 3600 Geography of Africa	3	Fall, Spring, Summer A & Summer B
INR 4350 International Environmental Relations	3	Spring; INR 2001 pre-req
WIS 4523 Human Dimensions of Natural Resource Conservation	3	Fall Note: Not if used for HD Common Requirement
WIS 4551 Diverse Perspectives in Conservation	3	Spring Note: Not if used for HD Common Requirement
Environmental Education and Communication		
AEC 3070C Digital Media Production in Agriculture and Natural Resources	3	Fall & Spring
AEC 3073 Intercultural Communication	3	Fall & Spring
AEC 3414 Leadership Development	3	Fall & Spring
AEC 4035 Communication Practices for Agricultural and Life Sciences	3	Fall & Spring
AEC 4036 Advanced Agricultural Communication Production	3	Fall & Spring
FNR 4070C Environmental Education Program	3	Fall in odd years Note: Not if used for HD Common Requirement
Environmental Planning and Management		
FNR 4623C Integrative Natural Resource Management	3	Spring
FNR 4080 Sustainable Ecotourism Development	3	Fall; Note: Not if used for HD Common Requirement
GEO 4554 Regional Development	3	Spring
URP 4000 Preview of Urban and Regional Planning	3	Fall & Spring
WIS and Other Courses with Appropriate Human Dimensions Focus		
WIS 4934 Zoo Management and Conservation	3	Fall
WIS 4905 Individual Problems/WEC	Varying	Letter grade
WIS 4911 Undergraduate Research/WEC	Varying	S/U grade
WIS 4915 Honors Thesis Research/WEC	Varying	S/U grade
WIS 4941 Practical Work Experience in Wildlife Ecology and Conservation	Varying	Letter Grade
ANT 4147C Environmental Archaeology	3	Fall (not Fall 2025)
GEO 4060 People and Parks	3	Spring

Other 3,000 level or above courses may count for this requirement as approved by Dr. Christina Romagosa, Undergraduate Coordinator.

Approved Quantitative Sciences Focus Area course options:

Note: Grouped Quantitative Sciences courses into categories by content. You may mix and match from all categories to develop your 12 credit Focus Plan.

Mathematics, Modeling and Statistics		
Course Number and Title	**Credits**	**Semester/Notes**
FNR 4934 Introduction to Programming with R	2	Summer B
MAC 2313 Analytic Geometry and Calculus 3	4	Fall & Spring
MAD 4401 Introduction to Numerical Analysis	3	Fall & Spring
MAP 2302 Elementary Differential Equations	3	Fall & Spring
MAP 4102 Probability Theory and Stochastic Processes 2	3	Spring
MAS 3114 Computational Linear Algebra	3	Fall & Spring
MAS 4105 Linear Algebra 1	4	Fall & Spring
STA 3100 Programming with Data in R	3	Fall, Spring & Summer A
STA 4210 Regression Analysis	3	Fall & Spring
STA 4211 Design of Experiments	3	Fall & Spring
STA 4222 Sample Survey Design	3	TBA
STA 4321 Introduction to Probability	3	Fall & Spring
STA 4504 Categorical Data Analysis	3	Fall & Spring
Computer Programming and Networks		
COP 3530 Data Structures and Algorithm	3	Fall & Spring; (COP 3504 or COP 3503) and COT 3100 and (MAC 2234 or MAC 2312 or MAC 2512 or MAC 3473), all with a minimum grade of C.
COP 4331 Object-oriented Programming	3	TBA
COT 3100 Applications of Discrete Structures	3	Fall, Spring & Summer C (MAC 2311 or MAC 3472) and (COP 3502 or equivalent), all with a minimum grade of C; Coreq: COP 3504 or COP 3503.
GIS and Remote Sensing		
GEO 3162C Intro to Quantitative Analysis for Geographers	3	Fall & Spring; STA 2023 or instructor permission
GIS 3043 Foundations of Geographical Information Systems	3	Fall, Spring & Summer A Note: Not if used for GIS & Planning Common Requirement
GIS 3072C Geographic Information Systems	3	Fall; Note: Not if used for GIS & Planning Common Requirement
SUR 3331C Photogrammetry	3	Spring
SUR 4380 Remote Sensing	3	Spring
URP 4273 Survey of Planning Information Systems	3	Fall
WIS & Other Courses with Appropriate Quantitative Focus		
WIS 4934 Topics in Wildlife Ecology and Conservation (Such as Biometry)		
WIS 4905 Individual Problems	Varying	
WIS 4941 Practical Work Experience	Varying	

Approved for The Wildlife Society (TWS) Certification course options:

Four approved focus courses (≥12 credits) must be successfully completed within the selected Focus Area. Courses used to fulfill WEC Common Requirements and other requirements may not be counted again as Focus Courses. All students must file a plan of study for Focus Area courses with WEC Student Services (102 Newins-Ziegler Hall) before completing 60 credit hours in the major. The plan must be approved by both the student's faculty advisor and the WEC Undergraduate Coordinator, Dr. Christina Romagosa. Course substitutions to the plan must also be approved by the WEC Undergraduate Coordinator.

You may select any courses necessary to fulfill the requirements for Certification by The Wildlife Society as an AWB-Certification_January-2023.pdf (wildlife.org) Associate Wildlife Biologist (The core WEC curriculum satisfies many of the requirements. However, choices made for Common Requirements may require additional courses in a particular area, and testing out of courses with AP, IB, etc. type courses may also require that these courses be taken again (as TWS does not accept dual enrollment high school coursework even if UF gave you credit). * Certification is not required to obtain your degree/graduate. A degree is not required for certification, only the appropriate combination of courses. Courses need not be taken at UF for certification, but UF requires most courses be taken at UF to fulfill the degree (particularly the final 30 credits of your degree). Below are the course requirements for certification with suggestions. The link above is to the actual TWS Certification Application. Credits from individual courses may be split among various sections/requirements if they meet the criteria.

*Note: In Spring 2018, TWS indicated they accept AP placement for coursework IF the AP exam score is 4 or higher. For example, if you received an exam score of 4 on the AP exam for STA 2023 Intro to Stats 1, TWS will accept this, and you do not need to retake the course at UF for the purpose of certification.

We strongly recommend that you read and pay close attention to the course requirements on TWS Associate Wildlife Biologist application (see above URL) form before choosing this focus area. There are several specific course requirements that must be adhered to fulfill certification requirements. Decisions on course substitutions are made by a TWS board, and NOT UF's Wildlife Ecology and Conservation Department. For questions about substitutions and other inquiries please contact Ms. Jennifer Murphy at certification@wildlife.org or by phone 301-897-9770, ext. 307.

Meet all requirements listed in each of the below tables to qualify

Wildlife Management and Biology: Minimum 12 Credit Hours Needed		
1) one course must focus on wildlife management, and 2) one course must be in either herpetology, mammalogy or ornithology. The herpetology/mammalogy/ornithology may not be substituted with work experience		
Course Number and Title	**Credits**	**Semester/Notes**
WIS 3401 Wildlife Ecology and Management	3	Fall and Spring
WIS 4427C Wildlife Habitat Management	3	Fall and Summer A
WIS 3402 Wildlife of Florida Lecture	3	Spring
WIS 4424 Large Mammal Ecology	3	Spring even years
ZOO 4427C Avian Biology	4	Spring
ZOO 4962C Herpetology	3	Spring
WIS 4570C Wildlife Behavior and Conservation	3	Fall
WIS 4934 Conservation of Reptiles and Amphibians	3	Fall in even years
WIS 4934 Ecology/Invasion of Reptiles and Amphibians	3	Fall in odd years

Ecology: Minimum 3 Credit Hours Needed		
Course Number and Title – choose 1	**Credits**	**Semester/Notes**
FNR 3500C Forest Ecology	3	Fall and Spring
PCB 3601C Plant Ecology	3	Spring
PCB 4043C General Ecology	4	Fall and Spring
WIS 3404 Natural Resource Ecology	3	Fall

The Wildlife Society (TWS) Certification Continued:

Zoology: Minimum 9 Credit Hours		
Course Number and Title – choose 3	**Credits**	**Semester/Notes**
BSC 2010/2010L Integrated Principles of Biology 1 & Lab	4	Fall, Spring, & Summer C
ENY3005/3005L Principles of Entomology & Lab	3	Fall, Spring, & Summer C
ENY 4210 Insects and Wildlife	3	Fall Prerequisite: ENY 3005L or BSC 2005L or equivalent
ZOO 4205C Invertebrate Biodiversity	4	Spring &Summer C Prerequisite: BSC 2011 and BSC 2011L with minimum grades of C
WIS 3553 Conservation Genetics	4	Spring
ZOO 4307 Vertebrate Biodiversity	4	Fall
ZOO 4962C Herpetology	3	Spring
ZOO 4403 Marine Biology	4	Fall & Summer C

Botany: Minimum 9 Credit Hours		
Course Number and Title – choose 3	**Credits**	**Semester/Notes**
BSC 2011/2011L Integrated Principles of Biology 2 & Lab	4	Fall, Spring & Summer C
BOT 2011C Plant Diversity	4	Spring
BOT 2710C Practical Plant Taxonomy	3	TBA
BOT 3151C Local Flora of North Florida	3	Fall & Spring
FNR 3131C - Dendrology/Forest Plants	3	Fall
ORH 3513C - Environmental Plant Identification and Use	3	Fall & Summer C Only
PCB 3601C Plant Ecology	3	Spring: If used to fulfill the Ecology requirement above, it CANNOT also be used here.

Physical Sciences: Minimum 9 Credit Hours		
Course Number and Title – choose 3	**Credits**	**Semester/Notes**
SWS 3022/L Introduction to Soils in the Environment and Lab	4	Fall & Spring; Lab also offered in Summer B
CHM 2045/2045L General Chemistry 1	4	Fall, Spring & Summer C
CHM 1025 Introduction to Chemistry	2	Fall, Spring, & Summer B
GLY 1150L Florida Geology Lab.	1	Fall, Spring, & Summer C Prerequisite: ENY 3005L or BSC 2005L or equivalent
Section Notes: Must have two disciplines represented through the courses you select.		

Basic Statistics: Minimum 3 Credit Hours		
Course Number and Title	**Credits**	**Semester/Notes**
STA 2023 Introduction to Statistics 1	3	Fall, Spring & Summers A and B

Quantitative Sciences: Minimum 6 Credit Hours		
Course Number and Title	**Credits**	**Semester/Notes**
MAC 2311 Analytic Geometry and Calculus 1	4	Fall, Spring & Summers B and C
WIS 4601C Quantitative Wildlife Ecology	3	Fall, Spring Prerequisite: STA 2023 and WIS 3401.
Acceptable courses: Calculus, biometry, college algebra, advanced algebra, trigonometry, systems analysis, mathematical modelling, sampling, computer science, GIS courses if relevant to wildlife habitat.		

Humanities and Social Sciences: Minimum 9 Credit Hours
Section Notes: Courses such as economics, sociology, physiology, political science, government, history, literature, or foreign language. Usually, completing your General Education and CALS required courses fulfills all nine of these credits. You should check, particularly if you tested out of some of these.

The Wildlife Society (TWS) Certification Continued:

Communications: Minimum 12 Credit Hours		
Course Number and Title	**Credits**	**Semester/Notes**
AEC 3030C Effective Oral Communication OR SPC 2608 Introduction to Public Speaking	3	Every semester CALS Requirement
AEC 3033C Research and Business Writing in Agricultural and Life Sciences OR ENC 2210 Technical Writing OR ENC 3254 Professional Writing	3	Every Semester CALS Requirement Prerequisite: Junior or senior standing. Attributes: Satisfies 6000 Words of Writing Requirement
Section Notes: 6 credit hours are met through CALS requirements. The other 6 credit hours are met with your general education requirements.		

Policy, Administration, and Law: Minimum 6 Credit Hours		
Course Number and Title	**Credits**	**Semester/Notes**
FNR 4660 Natural Resource Policy & Administration	3	Fall
FNR 3602 Society and Natural Resources	3	Spring
FNR 4080 Sustainable Ecotourism and Development	3	Fall
WIS 4523 Human Dimensions of Natural Resource Conservation	3	Fall
ECP 3302 Environmental Economics and Resource Policy	3	Fall
EES 4050 Environmental Planning and Design	3	Fall
WIS 4551 Diverse Perspectives in Conservation	3	Spring
AEB 3450 Introduction to Natural Resources and Environmental Economics	3	Fall
AEB 4126 Agricultural and Natural Resource Ethics	3	Fall & Spring; May work here (not reviewed by TWS yet)
Section Notes: WIS 4934 Conservation Law Enforcement will NOT work here.		

Approved Cooperative Education Focus Area course options:

Completing this focus area will include enrolling in 12 credits of WIS 4941 Internship in Wildlife Ecology and Conservation during one semester and working for a wildlife/natural resource agency or NGO fulltime (>40 hrs./week) for 16 weeks during that semester. The WEC contract that describes the work to be completed and contact information for the student's supervisor will be completed and approved by the WEC Undergraduate Coordinator before enrolling in the course. This WEC contract form is found on http://wec.ufl.edu/undergrad/forms.php.

IMPORTANT: Your internship must be approved, and you must be registered for WIS 4941 credits before you can count this experiential learning towards your WEC Focus requirement. Credit for wildlife internship experience cannot be earned retroactively or after the fact. Be sure you are registered in WIS 4941 before beginning your internship.

The Department of Wildlife Ecology and Conservation does not provide internships but can assist students in finding appropriate opportunities. It is the student's responsibility to locate and secure internships, which then must be approved by the WEC Undergraduate Coordinator (Dr. Christina Romagosa).

Approved Urban and Regional Planning to fulfill Dual Degree Requirements:

Recently WEC Faculty met with the Department of Urban and Regional Planning to discuss the possibility of WEC undergraduates pursuing a combined degree (Baccalaureate of Science in Wildlife Ecology and Conservation and a Master of Arts in Urban and Regional Planning in URP) in a five-year program. Students who satisfy the requirements for the M.A. in URP will further be eligible to pursue various certifications as professional planners. The URP M.A. requires a total of 52 graduate credits and to satisfy this requirement, URP requires that Undergraduates complete 21 of these graduate credits during their undergraduate curriculum.

Students selecting the Urban and Regional Planning Focus Area are required to complete 21 credit hours of "Focus" courses and these could cover the 21 graduate credits (6000 level or above) required by URP in the undergraduate portion of this combined degree program. The Department of Urban and Regional Planning assured us that undergraduates can master these courses and certainly will not be at any disadvantage compared to URP graduate students in the program. Upon graduation from the undergraduate portion of this program, students will have to satisfy 31 additional graduate credits in URP in the next year, with 6 of these credits being designated for the thesis.

Students must be advised by both a WEC faculty member and an Urban and Regional Planning faculty member.