Prep & Depth 2014-2015

Wildlife, Fish, and Conservation Biology (WFCB) is an ecologically oriented major that addresses the interactions of humans with animals in both natural and disturbed environments. Students are trained in the basic sciences, mathematics, and the biology and conservation of vertebrates in California and in many other parts of the world. The emphasis on basic sciences provides our students with the intellectual flexibility to handle the varied and often unexpected problems faced by biologists in the field and laboratory. It also makes sure students are prepared for graduate and professional schools and for alternative careers.

Preparatory Subject Matter Requirements

Preparatory Subject Matter	(46-47 Units)	Quarter(s) Offered***	Units	Completed	Notes
Written/Oral Expression					
University Writing Program 1	Expository Writing	I, II, III, IV	4	_____	_____
Communication 1	Introduction to Public Speaking	I, II, III, IV	4	_____	_____
Chemistry					
Chemistry 2A	General Chemistry	I, II, IV	5	_____	_____
Chemistry 2B	General Chemistry	II, III, IV	5	_____	_____
Chemistry 8A	Organic Chemistry	I, III, IV	2	_____	_____
Chemistry 8B	Organic Chemistry	I, II, IV	4	_____	_____
Biological Sciences					
BIS 2A	Introductory Biology	I, II, III, IV	4	_____	_____
BIS 2B	Introductory Biology	I, II, III, IV	5	_____	_____
BIS 2C	Introductory Biology	I, II, III, IV	5	_____	_____
Mathematics					
Mathematics 16A	Short Calculus	I, II, III, IV	3	_____	_____
Mathematics 16B	Short Calculus	I, II, III, IV	3	_____	_____
Physics					
Physics 1A	Principles of Physics	I	3	_____	_____
Physics 1B	Principles of Physics	II	3	_____	_____
Statistics					
Choose one of the following					
Statistics 100	Applied Statistics for Bio Sciences	I, II, III, IV	4	_____	_____
Plant Sciences 120	Applied Statistics in Ag Science	I	4	_____	_____
Wildlife & Conservation					
Choose one of the following					
WFC 10	Wildlife Ecology and Conservation	I, III	4	_____	_____
WFC 11*	Introduction to Conservation Biology	III	3	_____	_____
WFC 50	Natural History of CA Vertebrates	II	3	_____	_____

I = fall quarter, II = winter quarter, III = spring quarter, IV = summer session
*Course is offered in odd years only (2013, 2015, etc.)
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Depth Subject Matter Requirements

NOTE: Students graduating with this major are required to attain at least a C average (2.0 GPA) in all courses taken at the university in Depth Subject Matter *and* pass all coursework. See requirements of the College in the UCD General Catalog.

Depth Subject Matter	(54-60 Units)	Prerequisites	Qtr(s)***	Units	Completed
Ecology *(Choose one of the following)*					
ESP 100	General Ecology	BIS 2A-C; MAT 16A-B; STA 13 recommended	I, II	4	_____
EVE 101	Introduction to Ecology	BIS 2A-C; MAT 16A-C (or equiv.)	I, II, III, IV	4	_____
Genetics					
BIS 101	Genes and Gene Expression	BIS 2A-C (2C may be concurrent); CHE 8B (may be concurrent)	I, II, III, IV	4	_____
Evolution					
EVE 100	Introduction to Evolution	BIS 2A-C; BIS 101; MAT 16A-C or equiv; STA 13 or 100	I, II, III, IV	4	_____
Physiology					
WFC 130	Physiological Ecology	EVE 101 or ESP 100 or equivalent	II	4	_____
Animal Behavior *(Choose one of the following)*					
NPB 102	Animal Behavior	BIS 2A-C	II, III, IV	3	_____
WFC 141**	Behavioral Ecology	EVE 101 or ESP 100 or equivalent	II	4	_____
Conservation Biology					
WFC 154	Conservation Biology	EVE 101 or ESP 100 or equivalent	I	4	_____
Population Biology					
WFC 122	Population Dynamics and Estimation	MAT16A-B; STA13 or equiv; EVE 101, ESP 100, or equiv	III	4	_____
Organismal Core *(Choose 3 lecture courses and 2 laboratory courses)*					
WFC 110	Biology & Conservation of Wild Mammals	BIS 2A-C; EVE 101 or ESP 100 or equivalent	III	3	_____
WFC 110L	Lab in Biology & Conservation of Wild Mammals	WFC 110 (may be concurrent); consent of instructor	III	3	_____
WFC 111	Biology & Conservation of Wild Birds	BIS 2A-C; EVE 101 or ESP 100 or equivalent	I	3	_____
WFC 111L	Lab in Biology & Conservation of Wild Birds	WFC 111 (may be concurrent); consent of instructor	I	3	_____
WFC 120	Biology & Conservation of Fishes	BIS 2A-C	I	3	_____
WFC 120L	Lab in Biology & Cons of Fishes	WFC 120 (may be concurrent)	I	2	_____
WFC 134*	Herpetology	BIS 2A-C; EVE 101, ESP 100 or equivalent rec.	II	3	_____
WFC 134L*	Herpetology Laboratory	EVE 134 concurrently	II	2	_____
Research Methods *(Choose one of the following)*					
WFC 100	Field Methods in Wildlife, Fish, & Cons. Bio	EVE 101 or ESP 100 or equivalent; consent of instructor	III	4	_____
WFC 101/L**	Field Research in Wildlife Ecology + Lab	Consent of instructor & 1 upper division course in ecology, statistics, and ornithology, mammalogy, or herpetology	I	2/4	_____
GIS Technology *(Strongly recommended, but not required)*					
ABT/LDA 150	Geographic Info Systems	PLS 21 or equivalent with consent of instructor	I	4	_____
Anatomy *(Strongly recommended, but not required)*					
APC 100	Comparative Organology of Vertebrates	BIS 2A-B	II	4	_____

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Conservation Biology 2014-2015

Why study conservation biology?

Conservation Biology focuses heavily on the concept of biodiversity, which can be measured at the genetic, species, and ecosystem levels is a crisis or action-oriented discipline. Graduates are often asked to help save species and habitats at the last minute. This area of specialization is great for students interested in the study of the conservation of all species, the genetic diversity within each species, and t ecosystems of which they are a part.

Required Courses		Prerequisites	Qtr(s)***	Units	Completed
WFC 155/L	Habitat Conservation & Restoration	EVE 101 or ESP 100 or equivalent; WFC 154 & ENH 160 recommended	II	3	_____
	Habitat Conservation & Restoration: Lab	WFC 155 (may be concurrent)	II	2	_____
Choose one Policy course					
ESP 161	Environmental Law	1 course in Environmental Science (ex: ESP 1, 10, 110, BIS 2A or ETX 10)	III	4	_____
ESP 171	Urban and Regional Planning	ESP 1 & 1 course in Environmental Science and Social Science	III	4	_____
ESP 170*	Conservation Biology Policy	ESP 1; ECN 1A; ECN 100 or ARE 100A recommended	III	4	_____
Choose two Systems & Conservation courses					
EVE 147*	Biogeography	BIS 2B	I	4	_____
PLB/EVE 117	Plant Ecology	BIS 2A-C; PLB 111 recommended	I	4	_____
ESP 127	Plant Conservation Biology	EVE 101 or ESP 100 or equivalent	II	4	_____
EVE 115*	Marine Ecology	EVE 101, ESP 100, BIS 2A or consent of instructor	II	4	_____
WFC 152*	Ecology of Human-Wildlife Conflicts	BIS 2A-C or the equivalent	II	3	_____
ENH 160	Restoration Ecology	PLB 117, EVE 121, PLB 147, or equiv.	III	3	_____
EVE 138*	Ecology of Tropical Latitudes	One course in BIS, ENT, WFC, GEO, tropical experience or consent of instructor	III	5	_____
WFC 156††	Plant Geography	EVE 101 or ESP 100 or equivalent; PLB 102 or 108 strongly recommended	III	4	_____
WFC 157††	Coastal Ecosystems	EVE 101, ESP 100 or equiv; course work in organismal bio, phys geography, & geology rec		4	_____
Choose one Ethics course					
ANS 103	Animal Welfare	ANS 104 or NPB 102 or the equivalent or consent of instructor	I	4	_____
ANS 170	Ethics of Animal Use	Any basic course in composition or speech	III	4	_____

†Course is not regularly offered
††Future availability unknown

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