

Focus Depth Classes and Pre Requisites for 2019-2020

Agricultural and Environmental Education Major

*These are **recommended** courses, you can choose ANY UPPER DIVISION classes for your Focus Depth but they must be approved by your advisor*

Animal Science

Course	Pre Reqs	Units	Qtr	Course Title
Any upper division units from ANG, ANS or AVS				
ABI 102	CHE 2A & 2B, CHE 8A & 8B or 118A & 118B	5	F	Animal Biochemistry and Metabolism
NPB 101	BIS 2A, CHE 2B, PHY 1B or 7C strongly rec.	5	ALL	Systematic Physiology
NPB 121	NPB 101	4	W	Physiology of Reproduction
NUT 115	CHE 8B or 118B	4	W	Animal Nutrition
NUT 122	BIS 2A-2C, ABI 103 or BIS 103, NPB 101 or ANS 100, MAT 16B rec.	4	S	Ruminant Nutrition and Digestive Physiology
NUT 123	ABI 103 or BIS 103	3	S	Comparative Animal Nutrition
ANS 103	ANS 104 or NPB 102 or WFC 141 or consent of the instructor	4	F	Animal Welfare
ANS 104	ANS 2 or BIS 2B	4	F	Principles and Applications of Domestic Animal Behavior
ANS 141 Highly rec.	ANS 115, ECN 1A, 1B rec.	4	W EOY	Equine Enterprise Management
ANS 142 Highly rec.	ANS 42, BIS 101, ANS 100 or NPB 101, ABI 102 or BIS 102, ABI 103 or BIS 103 rec.	4	F	Companion Animal Care and Management
ANS 143 Highly rec.	ANS 41, NUT 115, ANS 100 or NPB 101	4	F EOY	Pig and Poultry Care and Management
ANS 144 Highly rec.	ANS 41, NUT 115, ANG 107 rec.	4	S	Beef Cattle and Sheep Production
ANS 170	Basic Composition or Speech Course	4	S	Ethics of Animal Use

EOY = Every Other Year

Applied Biological Systems Technology

Course	Pre Reqs	Units	Qtr	Course Title
ABT 142	None	2	S	Equipment and Technology for Small Farms
ABT 150	PLS 21 or equivalent with consent of the instructor	4	F	Introduction into Geographic Information Systems (GIS)
ABT 165	PHY 1A or PHY 5A	2	W	Irrigation Practices for an Urban Environment
ABT 182	ABT 180, or equivalent GIS experience and skills; general biology and ecology rec.	4	S	Environmental Analysis using GIS

Environmental Science and Natural Resources

Course	Pre Reqs	Units	Qtr	Course Title
ESM 121	PHY 10 OR GEL 1	3	F	Water and Society
ESP 100	BIS 2A-2C, MAT 16A and 16B, STA 13 rec.	4	F	General Ecology
ESP 101	ANT 1 or 2 or ESP 30 or EVE 100 or BIS 101	4	Offered irregularly	Ecology, Nature, and Society
ESP 110	PHY 1A or 7A, MAT 16B or 21B, and BIS 1A	4	W	Principles of Environmental Science
ESP 116N	GEL 1 or 2 or 16 or 50	3	W	Oceanography
ESP 161	Upper division standing, one course in environmental science or political science rec.	4	S	Environmental Law
EVE 101	BIS 2A-2C, MAT 16A-16C	4	ALL	Introduction to Ecology
PLS 101	PLS 2 or consent of instructor	3	W	Agriculture and the Environment
PLS 105	BIS 1C or PLS 2, CHE 8B	3	F	Concepts in Pest Management
PLS 110A	Course in general botany or PLS 2 rec.	3	F	Principles of Agronomic Crop Production in Temperate and Tropical Systems
WFC 110	BIS 2A-2C, EVE 101 or ESP 100	3	S	Biology and Conservation of Wild Mammals
WFC 111	BIS 2A-2C, EVE 101 or ESP 100	3	F	Biology and Conservation of Wild Birds
WFC 120	BIS 2A-2C	3	F	Biology and Conservation of Fishes
WFC 154	EVE 101 or ESP 100	4	F	Conservation Biology

EOY = Every Other Year

Environmental Horticulture

Course	Pre Reqs	Units	Qtr	Course Title
ENH 102	BIS 1C	4	NCO	Physiological Principles in Environmental Horticulture
ENH 105	ENH 6	4	S	Taxonomy and Ecology of Environmental Plant Families
ENH 120	SSC 10	3	F	Management of Container Media
ENH 125	PLS 2 or BIS 1C	5	W	Greenhouse and Nursery Crop Production
ENH 133	BIS 1C	4	W	Woody Plants in the Landscape: Growth, Ecology and Management
ENH 160	PBI 117 or EVE 121 or PLB 147	3	S	Restoration Ecology

Plant and Soil Science

Course	Pre Reqs	Units	Qtr	Course Title
PLB 102	PLS 2, BIS 1C or 2C, or equivalent course in PLS	5	S	California Floristics
PLB 105	BIS 2C	5	F	Developmental Plant Anatomy
PLB 116	BIS 1C or 2C, plant anatomy recommended	5	W	Plant Morphology and Evolution
PLB 117	BIS 1A-1C or 2A-2C, PLB 111 recommended	4	F	Plant Ecology
BIT 160	BIS 1A or 2A, BIS 101 or PLS 152	3	W	Principles of Plant Biotechnology
PLS 150	SSC 10, CHE 2A, PLS 2, BIS 1C or 2C	4	S	Sustainability and Agroecosystem Management
PLS 172	General plant science background (i.e. PLS 2, 12), PLS 196 recommended	4	F	Postharvest Physiology and Technology
PLS 176	PLS 2 or BIS 1C or 2C	4	W	Introduction to Weed Science
SSC 100	CHE 2B, PHY 1B, BIS 1A; GEL 50, BIS 1C recommended	5	F	Principles of Soil Science
SSC 102	SSC 100; general chemistry	3	W	Environmental Soil Chemistry
VEN 101A	VEN 2	3	F	Viticulture Practices
VEN 101B	VEN 2	3	W	Viticulture Practices
VEN 101C	VEN 2	3	S	Viticulture Practices

Agriculture Business and Economics

Course	Pre Reqs	Units	Qtr	Course Title
ARE 100A	ECN 1A & 1B, MAT 16C	4	ALL	Intermediate Microeconomics: Theory of Production and Consumption
ARE 100B	ARE 100A	4	ALL	Intermediate Microeconomics: Imperfect Competition, Markets and Welfare Economics
ARE 120	ARE 100A	4	S	Agricultural Policy
ARE 130	ARE 106	4	F	Agricultural Markets
ARE 138	ARE 100B	3	W	International Commodity and Resource Markets
ARE 145	None	4	W	Farm and Rural Resources Appraisal
ARE 150	ARE 100A	4	S	Agricultural Labor
ARE 175	ARE 100B or ECN 100	4	S	Natural Resource Economics
ARE 176	ARE 100B or ECN 100	4	W	Environmental Economics