

FISHERIES AND WILDLIFE DEGREE REQUIREMENTS

(Revised May 2008)

UNIVERSITY REQUIREMENTS: See **MSU Academic Programs** catalog
(<http://www.reg.msu.edu/ucc/AcademicPrograms.asp>)

- ❖ Minimum number of credits required - 120 (123 cr. if student was required to complete MTH 1825)
- ❖ Minimum cumulative grade point average - 2.00

WRITING REQUIREMENT:

- Tier I: WRA 110 - 195H (4 cr.)
- Tier II: Satisfied by completing FW 434

INTEGRATIVE STUDIES REQUIREMENT: (24 cr.)

- **Arts & Humanities** (8 cr.)
 - (A) Complete one IAH course numbered below 211 (4 cr.)
 - (B) Complete one IAH course numbered 211 or higher (4 cr.).
- **Social Science** (8 cr.)
 - Complete one 200-level ISS course (4 cr.)
 - Complete one 300-level ISS course (4 cr.)
- **Biological & Physical Sciences** (8 cr.) [*alternative track*]
 - Biological Sciences - Satisfied by completing BS 110 (4 cr.) or LB 144 (4 cr.)
 - Physical Sciences - Satisfied by completing CEM 141 (4 cr.), CEM 151 (4 cr.) or LB 171 (4 cr.).
 - Laboratory Experience - Satisfied by completing (PLB 106, BS 111L or LB 144) and (CEM 161 or LB 171L)
- **Diversity**
 - Must complete at least two of the three diversity designated courses ("D", "N" and "I") as part of the IAH and/or ISS requirements listed above. "D" - emphasizes both international/multicultural and national diversity; "N" - emphasizes national diversity; and "I" - emphasizes international and multicultural diversity.

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES REQUIREMENTS:

- MATH requirement: satisfied by completing MTH 124 (3 cr.), MTH 132 (3 cr.) or LB 118 (5 cr.).
- ECONOMICS requirement: Complete EC 201 (3 cr.) OR EC 202 (3 cr.)
- CANR Course [C] requirement: Must complete at least 26 credits of CANR courses. The Conservation Biology, Fisheries Biology and Management, Wildlife Biology and Management, Water Sciences, Fish and Wildlife Disease Ecology and Management and Preveterinary concentrations listed below all require the minimum required CANR credits. The Analytical Foundations of Fish and Wildlife Biology concentration does NOT require the minimum 26 CANR credits, thus students selecting this concentration must be sure to select a CANR course as one of the major course selections or as an elective. Non-CANR courses substituted for courses in any of the concentrations listed below may require a student to complete additional CANR course credits to meet the College's 26-credit requirement.

FISHERIES AND WILDLIFE REQUIREMENTS:

BIOLOGICAL SCIENCES (8 to 9 cr.)

Complete ONE of the following groups of courses

(1)	BS	110	Organisms and Populations	4
	PLB	105	Plant Biology	3
	PLB	106	Plant Biology Laboratory	1
(2)	BS	110	Organisms and Populations	4
	BS	111	Cells and Molecules	3
	BS	111L	Cells and Molecular Biology Laboratory	2
(3)	LB	144	Biology I - Organismal Biology	4
	LB	145	Biology II: Cellular and Molecular Biology	5

PHYSICAL SCIENCES (11 cr)

Complete ONE of the following groups of courses

(1)	CEM	141	General Chemistry	4
	CEM	161	Chemistry Laboratory I	1
(2)	CEM	151	General and Descriptive Chemistry	4
	CEM	161	Chemistry Laboratory I	1
(3)	LB	171	Principles of Chemistry I - Structure	4
	LB	171L	Introductory Chemistry Laboratory I	1

FISHERIES AND WILDLIFE REQUIREMENTS: (continued)

PHYSICAL SCIENCES (continued)

Complete ONE of the following courses

- | | | | | | |
|--------------------------|-----|-----|--|--|---|
| <input type="checkbox"/> | LB | 271 | Physics I | | 3 |
| <input type="checkbox"/> | PHY | 183 | Physics for Scientists and Engineers I | | 4 |
| <input type="checkbox"/> | PHY | 231 | Introductory Physics I | | 3 |

Complete ONE of the following courses

- | | | | | | |
|--------------------------|-----|-----|---|-----|---|
| <input type="checkbox"/> | CSS | 210 | Fundamentals of Soils and Landscape Science | [C] | 3 |
| <input type="checkbox"/> | CSS | 470 | Soil Resources | [C] | 3 |
| <input type="checkbox"/> | ENT | 319 | Introduction to Earth System Science | [C] | 3 |
| <input type="checkbox"/> | GEO | 203 | Introduction to Meteorology | | 3 |
| <input type="checkbox"/> | GEO | 206 | Physical Geography | | 3 |
| <input type="checkbox"/> | GLG | 201 | The Dynamic Earth | | 4 |

MATH and STATISTICS (6 cr.)

Complete ONE of the following courses

- | | | | | | |
|--------------------------|-----|-----|----------------------|--|---|
| <input type="checkbox"/> | MTH | 124 | Survey of Calculus I | | 3 |
| <input type="checkbox"/> | MTH | 132 | Calculus I | | 3 |
| <input type="checkbox"/> | LB | 118 | Calculus I | | 3 |

Complete ONE of the following courses

- | | | | | | |
|--------------------------|-----|-----|--|--|---|
| <input type="checkbox"/> | STT | 224 | Intro to Probability and Statistics for Ecologists | | 3 |
| <input type="checkbox"/> | STT | 231 | Statistics for Scientists | | 3 |
| <input type="checkbox"/> | STT | 421 | Statistics I | | 3 |

COMMUNICATION (6 cr.)

Complete ONE of the following courses

- | | | | | | |
|--------------------------|-----|-----|--|--|---|
| <input type="checkbox"/> | WRA | 320 | Technical Writing | | 3 |
| <input type="checkbox"/> | WRA | 331 | Writing in the Public Interest | | 3 |
| <input type="checkbox"/> | WRA | 341 | Writing Nature and the Nature of Writing | | 3 |
| <input type="checkbox"/> | WRA | 453 | Grant and Proposal Writing | | 3 |

Complete ONE of the following courses

- | | | | | | |
|--------------------------|-----|-----|---|-----|---|
| <input type="checkbox"/> | ESA | 401 | Ag and Nat. Resources Communication Campaigns | [C] | 3 |
| <input type="checkbox"/> | FW | 435 | Integrated Commun. for the FW Professional | [C] | 3 |
| <input type="checkbox"/> | JRN | 412 | Environmental Reporting | | 3 |

FISHERIES AND WILDLIFE REQUIREMENTS: (continued)

ETHICS and PHILOSOPHY (3 cr.)

Complete ONE of the following courses

<input type="checkbox"/>	FW	438	Philosophy of Ecology	[C]	3
<input type="checkbox"/>	PHL	340	Ethics		3
<input type="checkbox"/>	PHL	380	Nature of Science		3
<input type="checkbox"/>	PHL	484	Philosophy of Biological Science		3
<input type="checkbox"/>	GEO	432	Environmental Ethics		3

EXPERIENTIAL LEARNING (3 cr.)

Complete ONE of the following courses

<input type="checkbox"/>	FW	493	Professional Internship in Fisheries and Wildlife	[C]	3
<input type="checkbox"/>	FW	490	Independent Study	[C]	3
<input type="checkbox"/>	FW	480	International Studies in Fish and Wildlife	[C]	3
<input type="checkbox"/>	FW	499	Senior Thesis in Fisheries and Wildlife	[C]	3

FISHERIES & WILDLIFE CORE (19 cr.)

Complete ALL of the following courses

<input type="checkbox"/>	FW	101	Fisheries and Wildlife Fundamentals	[C]	3
<input type="checkbox"/>	FW	101L	Fisheries and Wildlife Fundamentals Lab	[C]	2
<input type="checkbox"/>	FW	293	Sophomore Seminar in Fisheries and Wildlife	[C]	1
<input type="checkbox"/>	FW	334	Human Dimension of Fish & Wildlife Management	[C]	3
<input type="checkbox"/>	FW	364	Ecological Problem Solving	[C]	3
<input type="checkbox"/>	FW	424	Population Analysis and Management	[C]	4
<input type="checkbox"/>	ZOL	355	Ecology		3

[C] = CANR Courses. Must complete at least 26 CANR course credits.

CONCENTRATIONS

Must complete ONE of the following seven concentrations: (1) Conservation Biology; (2) Fisheries Biology and Management; (3) Pre-veterinary; (4) Wildlife Biology and Management; (5) Water Sciences; (6) Fish and Wildlife Disease Ecology and Management; or (7) Analytical Foundations of Fisheries and Wildlife Biology. See detailed course requirements for each concentration below. These Concentrations are all transcriptable, and will officially appear on your transcripts after you graduate..

(1) CONSERVATION BIOLOGY CONCENTRATION (24 to 26 cr.)

Complete ALL of the following courses (12 cr.)

<input type="checkbox"/>	FW 443	Restoration Ecology	[C]	3
<input type="checkbox"/>	FW 444	Conservation Biology	[C]	3
<input type="checkbox"/>	PLB 441	Plant Ecology <i>OR</i> ZOL 370		3
<input type="checkbox"/>	ZOL 445	Evolution		3

Complete ONE of the following courses (3 to 4 cr.)

<input type="checkbox"/>	CSS 350	Introduction to Plant Genetics	[C]	3
<input type="checkbox"/>	ZOL 341	Fundamental Genetics		4

Complete ONE of the following courses (3 cr.)

<input type="checkbox"/>	FW 410	Upland Ecosystem Management	[C]	3
<input type="checkbox"/>	FW 414	Aquatic Ecosystem Management	[C]	3
<input type="checkbox"/>	FW 416	Marine Ecosystem Management	[C]	3
<input type="checkbox"/>	FW 417	Wetland Ecology and Management	[C]	3
<input type="checkbox"/>	FW 479	Fisheries Management	[C]	3

Complete ONE of the following courses (3 cr.)

<input type="checkbox"/>	EEP 255	Ecological Economics	[C]	3
<input type="checkbox"/>	ESA 430	Law and Resources	[C]	3
<input type="checkbox"/>	FOR 464	Forest Resource Economics	[C]	3
<input type="checkbox"/>	FOR 466	Natural Resource Policy	[C]	3
<input type="checkbox"/>	FW 481	Global Issues in Fisheries and Wildlife	[C]	3
<input type="checkbox"/>	ZOL 446	Environmental Issues and Public Policy		3

Complete ONE of the following courses (3 to 4 cr.)

<input type="checkbox"/>	ENT 422	Aquatic Entomology	[C]	3
<input type="checkbox"/>	FOR 204	Forest Vegetation	[C]	4
<input type="checkbox"/>	FW 471	Ichthyology	[C]	4
<input type="checkbox"/>	PLB 218	Plants of Michigan		3
<input type="checkbox"/>	PLB 418	Plant Systematics		3
<input type="checkbox"/>	ZOL 360	Biology of Birds		4
<input type="checkbox"/>	ZOL 361	Michigan Birds		4
<input type="checkbox"/>	ZOL 365	Biology of Mammals		4
<input type="checkbox"/>	ZOL 384	Biology of Amphibians and Reptiles		4

Electives: Complete the necessary number of elective credits needed to reach the required 120 credit minimum (123 credits if you were required to complete MTH 1825) for graduation. There are no restrictions on what counts as an elective course, but you're strongly encouraged to speak with Jim Schneider regarding courses that will help you meet your professional objectives.

Students selecting the Conservation Biology Concentration should consider completing the requirements for the Certified Fisheries Scientist, Certified Wildlife Biologist and/or the Professional Wetland Scientist certification programs.

(2) FISHERIES BIOLOGY AND MANAGEMENT (25 to 27 cr.)

Complete ALL of the following courses (13 cr.)

<input type="checkbox"/>	FW	420	Stream Ecology <i>OR</i> FW 472	Limnology	[C]	3
<input type="checkbox"/>	FW	471	Ichthyology		[C]	4
<input type="checkbox"/>	FW	479	Fisheries Management		[C]	3
<input type="checkbox"/>	FW	470	Fisheries Techniques		[C]	3

Complete ONE of the following courses (3 cr.)

<input type="checkbox"/>	FW	414	Aquatic Ecosystem Management		[C]	3
<input type="checkbox"/>	FW	416	Marine Ecosystem Management		[C]	3
<input type="checkbox"/>	FW	417	Wetland Ecology and Management		[C]	3

Complete ONE of the following courses (3 or 4 cr.)

<input type="checkbox"/>	ENT	422	Aquatic Entomology		[C]	3
<input type="checkbox"/>	ZOL	306	Invertebrate Biology		4	

Complete ONE of the following courses (3 cr.)

<input type="checkbox"/>	PLB	418	Plant Systematics			3
<input type="checkbox"/>	PLB	424	Algal Biology			3

Complete ONE of the following courses (3 or 4 cr.)

<input type="checkbox"/>	FW	473	Environmental Fish Physiology		[C]	3
<input type="checkbox"/>	ZOL	328	Comparative Anatomy and Biology of Vertebrates			4
<input type="checkbox"/>	ZOL	341	Fundamental Genetics			4
<input type="checkbox"/>	ZOL	483	Environmental Physiology			4

Electives: Complete the necessary number of elective credits needed to reach the required 120 credit minimum (123 credits if you were required to complete MTH 1825) for graduation. At present, there are no restrictions on what counts as an elective course, but you're strongly encouraged to speak with Jim Schneider regarding courses that will help you meet your professional objectives.

Students selecting the Fisheries Biology and Management Concentration should consider completing the requirements for the American Fisheries Society's Certified Fisheries Scientist certification program.

(3) WILDLIFE BIOLOGY AND MANAGEMENT (24 to 25 cr.)

Complete ALL of the following courses (9 cr.)

- | | | | | | |
|--------------------------|----|-----|---|-----|---|
| <input type="checkbox"/> | FW | 410 | Upland Ecosystem Management | [C] | 3 |
| <input type="checkbox"/> | FW | 417 | Wetland Ecology and Management | [C] | 3 |
| <input type="checkbox"/> | FW | 413 | Wildlife Research and Management Techniques | [C] | 3 |

Complete TWO of the following courses (8 cr.)

- | | | | | | |
|--------------------------|-----|-----|------------------------------------|----------------|---|
| <input type="checkbox"/> | ZOL | 360 | Biology of Birds <u>OR</u> ZOL 361 | Michigan Birds | 4 |
| <input type="checkbox"/> | ZOL | 365 | Biology of Mammals | | 4 |
| <input type="checkbox"/> | ZOL | 384 | Biology of Amphibians and Reptiles | | 4 |

Complete ONE of the following courses (3 or 4 cr.)

- | | | | | | |
|--------------------------|-----|-----|--------------------|-----|---|
| <input type="checkbox"/> | FOR | 204 | Forest Vegetation | [C] | 4 |
| <input type="checkbox"/> | PLB | 218 | Plants of Michigan | | 3 |
| <input type="checkbox"/> | PLB | 418 | Plant Systematics | | 3 |

Complete ONE of the following courses (4 cr.)

- | | | | | | |
|--------------------------|-----|-----|--|--|---|
| <input type="checkbox"/> | ZOL | 328 | Comparative Anatomy and Biology of Vertebrates | | 4 |
| <input type="checkbox"/> | ZOL | 341 | Fundamental Genetics | | 4 |
| <input type="checkbox"/> | ZOL | 483 | Environmental Physiology | | 4 |

Electives: Complete the necessary number of elective credits needed to reach the required 120 credit minimum (123 credits if you were required to complete MTH 1825) for graduation. At present, there are no restrictions on what counts as an elective course, but you're strongly encouraged to speak with Jim Schneider regarding courses that will help you meet your professional objectives.

Students selecting the Wildlife Biology and Management Concentration should consider completing the requirements for The Wildlife Society's Certified Wildlife Biologist certification program.

(4) WATER SCIENCES (24 to 27 cr.)

Complete TWO of the following courses (6 cr.)

- | | | | | | |
|--------------------------|----|-----|--------------------------------|-----|---|
| <input type="checkbox"/> | FW | 472 | Limnology | [C] | 3 |
| <input type="checkbox"/> | FW | 420 | Stream Ecology | [C] | 3 |
| <input type="checkbox"/> | FW | 417 | Wetland Ecology and Management | [C] | 3 |

Complete the following course (3cr.)

- | | | | | | |
|--------------------------|----|-----|-------------------------|-----|---|
| <input type="checkbox"/> | FW | 474 | Limnological Techniques | [C] | 3 |
|--------------------------|----|-----|-------------------------|-----|---|

Complete ONE of the following courses (3 cr.)

- | | | | | | |
|--------------------------|----|-----|------------------------------|-----|---|
| <input type="checkbox"/> | FW | 414 | Aquatic Ecosystem Management | [C] | 3 |
| <input type="checkbox"/> | FW | 416 | Marine Ecosystem Management | [C] | 3 |
| <input type="checkbox"/> | FW | 479 | Fisheries Management | [C] | 3 |

Complete ONE of the following courses (3 or 4 cr.)

- | | | | | | |
|--------------------------|-----|-----|----------------------|-----|---|
| <input type="checkbox"/> | ZOL | 306 | Invertebrate Biology | | 4 |
| <input type="checkbox"/> | ENT | 422 | Aquatic Entomology | [C] | 3 |
| <input type="checkbox"/> | FW | 471 | Ichthyology | [C] | 4 |

Complete ONE of the following courses (3 cr.)

- | | | | | | |
|--------------------------|-----|-----|-------------------|--|---|
| <input type="checkbox"/> | PLB | 418 | Plant Systematics | | 3 |
| <input type="checkbox"/> | PLB | 424 | Algal Biology | | 3 |

Complete TWO of the following courses (6 or 8 cr.)

- | | | | | | |
|--------------------------|-----|-----|--|-----|---|
| <input type="checkbox"/> | FW | 454 | Environmental Hydrology and Watershed Management | [C] | 3 |
| <input type="checkbox"/> | FW | 473 | Environmental Fish Physiology | [C] | 3 |
| <input type="checkbox"/> | GLG | 303 | Oceanography | | 3 |
| <input type="checkbox"/> | GLG | 421 | Environmental Geochemistry | | 4 |
| <input type="checkbox"/> | MMG | 425 | Microbial Ecology | | 3 |
| <input type="checkbox"/> | MMG | 426 | Biogeochemistry | | 3 |
| <input type="checkbox"/> | ZOL | 341 | Fundamental Genetics | | 4 |
| <input type="checkbox"/> | ZOL | 353 | Marine Biology | | 4 |
| <input type="checkbox"/> | ZOL | 483 | Environmental Physiology | | 4 |

Electives: Complete the necessary number of elective credits needed to reach the required 120 credit minimum (123 credits if you were required to complete MTH 1825) for graduation. There are no restrictions on what counts as an elective course, but you're strongly encouraged to speak with Jim Schneider regarding courses that will help you meet your professional objectives.

Students selecting the Water Sciences Concentration should consider completing the requirements for the Certified Fisheries Scientist and/or the Professional Wetland Scientist certification programs.

(5) FISH AND WILDLIFE DISEASE ECOLOGY AND MANAGEMENT (27 to 28 cr.)

Complete ALL of the following courses (17 cr.)

<input type="checkbox"/>	MMG	301	Introductory Microbiology		3
<input type="checkbox"/>	FW	423	Principles of Fish and Wildlife Disease	[C]	3
<input type="checkbox"/>	FW	423L	Principles of Fish and Wildlife Disease Laboratory	[C]	1
<input type="checkbox"/>	FW	444	Conservation Biology	[C]	3
<input type="checkbox"/>	ZOL	445	Evolution		3
<input type="checkbox"/>	EPI	390	Disease in Society: Intro to Epidemiology & Public Health		4

Complete ONE of the following courses (4 cr.)

<input type="checkbox"/>	ANS	314	Genetic Improvement of Domestic Animals	[C]	4
<input type="checkbox"/>	ZOL	341	Fundamental Genetics		4

Complete ONE of the following courses (3 cr.)

<input type="checkbox"/>	FW	410	Upland Ecosystem Management	[C]	3
<input type="checkbox"/>	FW	414	Aquatic Ecosystem Management	[C]	3
<input type="checkbox"/>	FW	416	Marine Ecosystem Management	[C]	3
<input type="checkbox"/>	FW	417	Wetland Ecology and Management	[C]	3
<input type="checkbox"/>	FW	479	Fisheries Management	[C]	3

Complete ONE of the following courses (3 to 4 cr.)

<input type="checkbox"/>	FW	471	Ichthyology	[C]	4
<input type="checkbox"/>	ZOL	306	Invertebrate Biology	4	
<input type="checkbox"/>	ZOL	316	General Parasitology		3
<input type="checkbox"/>	ZOL	360	Biology of Birds		4
<input type="checkbox"/>	ZOL	361	Michigan Birds		4
<input type="checkbox"/>	ZOL	365	Biology of Mammals		4
<input type="checkbox"/>	ZOL	384	Biology of Amphibians and Reptiles		4

Electives: Complete the necessary number of elective credits needed to reach the required 120 credit minimum (123 credits if you were required to complete MTH 1825) for graduation. There are no restrictions on what counts as an elective course, but you're strongly encouraged to speak with Jim Schneider regarding courses that will help you meet your professional objectives.

Students selecting the Fish and Wildlife Disease Ecology and Management Concentration should consider completing the requirements for the Certified Fisheries Scientist and/or the Certified Wildlife Biologist certification programs.

(6) PREVETERINARY (36 cr) - This concentration meets the minimum requirements established by MSU for admission to the MSU College of Veterinary Medicine.

Complete ALL of the following courses (32 cr.)

<input type="checkbox"/>	ANS	313	Principles of Animal Feeding and Nutrition	[C]	4
<input type="checkbox"/>	BMB	401	Basic Biochemistry		4
<input type="checkbox"/>	CEM	251	Organic Chemistry I		3
<input type="checkbox"/>	CEM	252	Organic Chemistry II		3
<input type="checkbox"/>	CEM	255	Organic Chemistry Lab		2
<input type="checkbox"/>	FW	423	Principles of Fish and Wildlife Disease	[C]	3
<input type="checkbox"/>	FW	423L	Principles of Fish and Wildlife Disease Laboratory	[C]	1
<input type="checkbox"/>	MMG	301	Introductory Microbiology		3
<input type="checkbox"/>	MMG	302	Introductory Microbiology Laboratory		1
<input type="checkbox"/>	MMG	409	Eukaryotic Cell Biology		3
<input type="checkbox"/>	PHY	232	Introductory Physics II		3
<input type="checkbox"/>	PHY	251	Introductory Physics Lab I		1
<input type="checkbox"/>	PHY	252	Introductory Physics Lab II		1

Complete ONE of the following courses (4 cr.)

<input type="checkbox"/>	ANS	314	Genetic Improvement of Domestic Animals	[C]	4
<input type="checkbox"/>	ZOL	341	Fundamental Genetics		4

Electives: Complete the necessary number of elective credits needed to reach the required 120 credit minimum (123 credits if you were required to complete MTH 1825) for graduation. There are no restrictions on what counts as an elective course, but you're strongly encouraged to speak with Jim Schneider regarding courses that will help you meet your professional objectives.

(7) ANALYTICAL FOUNDATIONS OF FISHERIES & WILDLIFE BIOLOGY (24 to 29 cr.)

Complete ONE course from each following four groups (12 or 15 cr.)

(1)	CEM	142	General and Inorganic Chemistry		3
	CEM	152	Principles of Chemistry		3
	LB	172	Principles of Chemistry II - Reactivity		3
(2)	LB	272	Physics II		3
	PHY	184	Physics for Scientists and Engineers II		4
	PHY	232	Introductory Physics II		3
(3)	LB	119	Calculus II		4
	MTH	126	Survey of Calculus II		3
	MTH	133	Calculus II		4
(4)	CSS	350	Introduction to Plant Genetics	[C]	3
	ZOL	341	Fundamental Genetics		4

Complete the following course (3 cr.)

<input type="checkbox"/>	ZOL	445	Evolution		3
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Complete ONE of the following courses (3 cr.)

<input type="checkbox"/>	FW	410	Upland Ecosystem Management	[C]	3
<input type="checkbox"/>	FW	414	Aquatic Ecosystem Management	[C]	3
<input type="checkbox"/>	FW	416	Marine Ecosystem Management	[C]	3
<input type="checkbox"/>	FW	417	Wetland Ecology and Management	[C]	3
<input type="checkbox"/>	FW	479	Fisheries Management	[C]	3

Complete ONE of the following courses (3 to 4 cr.)

<input type="checkbox"/>	ENT	422	Aquatic Entomology	[C]	3
<input type="checkbox"/>	FW	471	Ichthyology	[C]	4
<input type="checkbox"/>	PLB	418	Plant Systematics		3
<input type="checkbox"/>	PLB	424	Algal Biology		3
<input type="checkbox"/>	ZOL	360	Biology of Birds		4
<input type="checkbox"/>	ZOL	361	Michigan Birds		4
<input type="checkbox"/>	ZOL	365	Biology of Mammals		4
<input type="checkbox"/>	ZOL	384	Biology of Amphibians and Reptiles		4

Complete at least 3 credits of additional Fisheries and Wildlife (FW) course(s), 300-level or higher

[C] 3

Electives: Complete the necessary number of elective credits needed to reach the required 120 credit minimum (123 credits if you were required to complete MTH 1825). There are no restrictions on what counts as an elective course, but you're strongly encouraged to speak with Jim Schneider regarding courses that will help you meet your professional objectives. Be sure that you've also completed the required minimum 26 CANR course credits [C].

Students selecting the Analytical Foundations of Fisheries and Wildlife Biology Concentration should consider completing the requirements for the Certified Fisheries Scientist, Certified Wildlife Biologist and/or the Professional Wetland Scientist certification programs.