

**COURSE REQUIREMENTS: BS IN BIOLOGY – ECOLOGY & ENVIRONMENTAL BIOLOGY CONCENTRATION (6213)**

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 Minimum total credit hours 120  
**Minimum upper-division (UD) hours 42**  
**(Note that all UD courses are bold-faced)**  
 Maximum hours in any one subject 50  
 Completion of sheet = 108-110 credit hours  
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Communication (9 hours)  
 ENGL 111 English Composition<sup>1</sup> \_\_\_/3  
 ENGL 112 English Composition<sup>1,2</sup> \_\_\_/3  
 COMM 230 Public Speaking<sup>2</sup> \_\_\_/3

<sup>1</sup>Must earn a C or better  
<sup>2</sup>Prereq ENGL 111

Foreign Language (3 hours)  
 Language: \_\_\_\_\_  
 122 Elementary II \_\_\_/3  
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Humanities (9 hours) *Select any sequence plus one from another discipline*  
 ENGL 250 British Lit Tradition<sup>3</sup> \_\_\_/3  
 ENGL 251 British Lit Tradition<sup>3</sup> \_\_\_/3  
 ENGL 260 American Lit Tradition<sup>3</sup> \_\_\_/3  
 ENGL 261 American Lit Tradition<sup>3</sup> \_\_\_/3  
 ENGL 270 World Literature<sup>3</sup> \_\_\_/3  
 ENGL 271 World Literature<sup>3</sup> \_\_\_/3  
 HIST 121 Dev World Civilization I \_\_\_/3  
 HIST 122 Dev World Civilization II \_\_\_/3  
 HIST 201 History of the US I \_\_\_/3  
 HIST 202 History of the US II \_\_\_/3  
 PHIL 110 Advent of Ideas: Hist \_\_\_/3  
 PHIL 120 Advent of Ideas: Cont \_\_\_/3  
<sup>3</sup>Prereq ENGL 111&112  
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Additional Courses Taken  
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 Fine Arts (3 hours) *Select one*  
 ART 110 Und Visual Art \_\_\_/3  
 ARTH 210 The History of Art \_\_\_/3  
 ARTH 211 The History of Art \_\_\_/3  
 DANC 110 Understanding Dance \_\_\_/3  
 MUS 111 Masterpieces of Music \_\_\_/3  
 MUS 112 Music in Our Time \_\_\_/3  
 MUS 114 Hist. Survey of Jazz \_\_\_/3  
 MUS 115 Study of Popular Music \_\_\_/3  
 THEA 110 Understanding Theatre \_\_\_/3  
 THEA 111 Understanding Theatre \_\_\_/3  
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Social and Behavioral Sciences (6 hours)  
*Select two from different disciplines*  
 ECON 201 Princ Macroeconomics \_\_\_/3  
 ECON 202 Princ Microeconomics \_\_\_/3  
 GEOG 151 IRG: No Am, Eur Russ \_\_\_/3  
 GEOG 152 IRG: Asia, Africa, Lat Am \_\_\_/3  
 GEOG 202 Intro to Cult Geog \_\_\_/3  
 POSC 210 Am Gov Politics \_\_\_/3  
 POSC 220 Am. Polit. Inst. & Pol. \_\_\_/3  
 POSC 230 Intro. World Politics \_\_\_/3  
 PSYC 101 General Psychology \_\_\_/3  
 SOC 201 General Sociology \_\_\_/3  
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Mathematics (6-7 hours)<sup>4</sup>  
*Select one – must earn a C or better*  
 MATH 160 Calc Business & Life Sci \_\_\_/3  
 MATH 251 Calculus I \_\_\_/4  
*Also take – must earn a C or better*  
 MATH 210 Elem Stats & Probability \_\_\_/3  
<sup>4</sup>May also need MATH 100-110 or 140  
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Laboratory Science (8 hours): *select one sequence – must earn a C or better*  
 ASTR 201 Astronomy \_\_\_/4  
 ASTR 202 Astronomy \_\_\_/4  
 GEOL 110 Intro to Physical Geology \_\_\_/4  
 GEOL 120 Environmental Geology \_\_\_/4  
 PHYS 211 College Physics<sup>5, 6</sup> \_\_\_/4  
 PHYS 212 College Physics \_\_\_/4  
<sup>5</sup>Prereq MATH 110, 140 or higher  
<sup>6</sup>Can substitute PHYS 220-221 for 211-212

*Students must earn a C or better in each of the following classes.*

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 Chemistry (12 hours)  
 CHEM 121 General Chemistry<sup>7</sup> \_\_\_/4  
 CHEM 122 General Chemistry \_\_\_/4  
*Select*  
**CHEM 310 Organic / Biochemistry \_\_\_/3**  
**CHEM 319 Organic & Biochem Lab \_\_\_/1**  
 or  
**CHEM 341 Organic Chemistry \_\_\_/4**  
<sup>7</sup>Prereq MATH 140 or higher, or placement in MATH 251  
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Professional Skills (3 hours): *select one*  
**AGRI/GEOG 270 Intro Geo. Tech \_\_\_/3**  
**GEOG 310 Principles of GIS \_\_\_/3**  
**GEOG 364 Intro Remote Sensing \_\_\_/3**  
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Biology (22 hours)  
 BIOL 130<sup>8,9</sup> Found Bio: Eco, Evo, Div \_\_\_/4  
 BIOL 140<sup>9</sup> Found Bio: Cell & Molec \_\_\_/4  
**BIOL 331<sup>10</sup> General Ecology \_\_\_/3**  
**BIOL 336<sup>10</sup> Introductory Genetics \_\_\_/3**  
**BIOL 337<sup>10</sup> Cell Biology \_\_\_/3**  
**BIOL 391<sup>10</sup> Evolutionary Biology \_\_\_/3**  
*Select one seminar course:*  
**BIOL 410 or 411<sup>10</sup> Seminar Biol Sci \_\_\_/1**

<sup>8</sup>Not prereq for BIOL 140;  
<sup>9</sup>Placement ≥ MATH 140 recommended  
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Botany (3 hours)<sup>10</sup>  
**BOT 303 Plant Taxonomy \_\_\_/3**  
 or  
**BOT 306 Aq. & Wetland Plants<sup>14</sup> \_\_\_/3**  
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Ecology (7 hours)<sup>10</sup>  
**BIOL 443 Ecological Methods \_\_\_/3**  
*Select*  
**BOT 431 Plant Ecology \_\_\_/3**  
**BOT 432 Plant Ecology Lab \_\_\_/1**  
 or  
**ZOOL 441 Animal Ecology \_\_\_/3**  
**ZOOL 442 Animal Ecology Lab \_\_\_/1**

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 Zoology (3-4 hours): *select one*<sup>10</sup>  
**ZOOL 315 Invertebrate Zoology \_\_\_/3**  
**ZOOL 319 Mammalogy \_\_\_/3**  
**ZOOL 320 Ichthyology \_\_\_/3**  
**ZOOL 321 Ornithology \_\_\_/3**  
**ZOOL 322 Herpetology \_\_\_/3**  
**ZOOL 323 Field Ornithology<sup>11</sup> \_\_\_/3**  
**ZOOL 325 General Entomology \_\_\_/4**  
**ZOOL 326 Aquatic Macroinverts<sup>11</sup> \_\_\_/3**  
**ZOOL 327 Field Herpetology<sup>11</sup> \_\_\_/3**  
**ZOOL 328 Natural Hist. of Vert. \_\_\_/3**  
**ZOOL 440 General Parasitology \_\_\_/4**  
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Electives (14 total hours)<sup>10,11,12,13</sup>  
*Recommended electives:*  
**BIOL 418 Limnology \_\_\_/3**  
**BIOL 444 Conservation Biology \_\_\_/3**  
**BIOL 475 Field Invest Biology \_\_\_/3**  
**BOT 302 Plant Morphology \_\_\_/3**  
**BOT 305 Freshwater Algae<sup>13</sup> \_\_\_/3**  
**BOT 431 Plant Ecology \_\_\_/3**  
**BOT 432 Plant Ecology Lab \_\_\_/1**  
**PLSC 341 Dendrology & For Eco \_\_\_/3**  
**SOIL 430 Wetland Science \_\_\_/3**  
**ZOOL 441 Animal Ecology \_\_\_/3**  
**ZOOL 442 Animal Ecology Lab \_\_\_/1**  
**ZOOL 443 Animal Behavior \_\_\_/3**  
**Botany, Ecology, or Zoology courses listed above that have not been used for other requirements**

*Other Electives (need at least 42 UD hrs)*  
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<sup>10</sup>BIOL 130 & 140 prereq for all UD BIOL/BOT/MBIO/ZOOL  
<sup>11</sup>Taught at the Reelfoot Lake Environmental Field Station  
<sup>12</sup>200 courses may not be used  
<sup>13</sup>≤ 6 hours may be used from BCHE, PLSC 341, or SOIL 430