



# GENERAL CURRICICULUM (default if no concentration declared)

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| <b>General Biodiversity</b> <sup>1,2</sup><br>BIO 321, 322, 323, 324 329, 335, 336, 429; BOT 313;<br>MCRO 224 <sup>3</sup> , 402; MSCI 324  | 4         |
| <b>400-Level Electives</b> <sup>1,4</sup><br>Select from any 400 level BIO/BOT/MCRO/MSCI course,<br>except BIO 400, 450, 461, 462, 463.   | 12        |
| <b>300-400 Level Electives</b> <sup>1,2</sup><br>Select any 300-400 level BIO/BOT/MCRO/MSCI course,<br>except BIO 300, 330, 400, 450, 461, 462, 463   | 8         |
| <b>APPROVED ELECTIVES</b> <sup>1,5,6,7,8</sup><br>At least 12 units must be upper division.   |           |
| <b>General Electives</b> <sup>7,8</sup><br>Any BIO/BOT/MCRO/MSCI course.  | 4         |
| <b>Additional Electives</b> <sup>7,8</sup><br>Select from the following: Any BIO/BOT/MCRO/MSCI course;<br>AG/EDES/ENGR/ISLA/SCM/UNIV 350; ANT 401, ASCI 239,<br>351, 403; ASCI 405 or BIO 407; ASCI 406, 438; CHEM 217,<br>218, 220, 223, 313 or 371, 331, 341, 372, 377, 418, 428, 474;<br>COMS 418; CSC 101; DATA 301; ENGR 322/SCM 302 <sup>9</sup> ;<br>ERSC/GEOG 250; ES/WGS 350; FSN 310; GEOG 440; KINE<br>406, 445, 446; LA/NR 218 or GEOG 318; NR 141, 142, 404,<br>416, 418, 425; PHIL 323 or PHIL 339 or PHIL 341; PSC 201;<br>PSY 320, 340; SS 120, 321, 322, 422; STAT 313, 324 or 334,<br>330, 416, 419, 421. | 15        |
|   | <b>43</b> |

# ANATOMY AND PHYSIOLOGY CONCENTRATION

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| BIO 452 Cell Biology   | 4         |
| CHEM 371 or CHEM 313   | 5         |
| <b>A&amp;P Biodiversity</b> <sup>1,2</sup><br>AEPS/BOT 323, BIO 321, 322, 323, 324, 329, 335, 336,<br>415; BOT 313; MCRO 224 <sup>3</sup> ; MSCI 324, 437  | 4         |
| <b>Core Anatomy and Physiology</b> <sup>1,2</sup><br>BIO 406, 407 or ASCI 405, BIO 408, 409, 410, 426.   | 16        |
| <b>Department Electives</b> <sup>1,2</sup><br>BIO 321, 322, 323, 324, 329, 335, 336, 405, 406, 407 or ASCI 405,<br>408, 409, 410, 415, 426, 428, 429, 434, 435, 470; BIO/CHEM 475;<br>MCRO 224 <sup>3</sup> , 225, 320, 342, 402, 423, 424   | 3         |
| <b>Approved Electives</b> <sup>1,7,8,9</sup> (At least 4 units must be upper div)<br>AEPS/BOT 323; ANT 401; ASCI 351, 406, 438; BIO 300 <sup>8</sup> , 321,<br>322, 323, 324, 329, 335, 336, 400 <sup>8</sup> , 405, 406, 407 or ASCI 405,<br>408, 409, 410, 415, 426, 428, 429, 434, 435, 461 <sup>7</sup> , 462 <sup>7</sup> , 463,<br>470; BIO/CHEM 475; BOT 313; CHEM 217, 218, 220, 223,<br>372, 418, 428; COMS 418; CSC 101, DATA 301; ENGR<br>322/SCM 302 <sup>9</sup> ; FSN 310; KINE 406, 445, 446; MCRO 225,<br>320, 342, 402, 423, 424; MSCI 324, 437; PHIL 323 or PHIL 339<br>or PHIL 341; PSY 320, 340; STAT 313; WGS/ES 350. | 11        |
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# MOLECULAR AND CELLULAR BIOLOGY CONCENTRATION

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| BIO 452 Cell Biology   | 4         |
| BIO/CHEM 475 Molecular Biology Laboratory  | 3         |
| CHEM 217 Organic Chemistry II  | 3         |
| CHEM 220 Organic Chem Lab II   | 1         |
| CHEM 371 Biochemical Principles  | 5         |
| MCRO 224 General Microbiology I  | 5         |
| <b>Advanced Cell and Molecular Applications</b> <sup>1,2</sup><br>Select from the following: ASCI 403; BIO 405, 426, 428;<br>BIO/CHEM 441, 476; CHEM 372, 418, 474; MCRO 402,  | 10        |
| <b>Approved Electives</b> <sup>1,5,8,11,12</sup><br>Select from any 300-400 level BIO/BOT/MCRO/ MSCI courses<br>(including Advanced Cell and Molecular Applications from the list<br>above); or select from the following (at least 5 units must be upper<br>division): ASCI 403, 406; BIO/CHEM 202; CHEM 218, 223, 331, 372,<br>377, 418, 428, 474; CSC 101; DATA 301; ENGR 322/SCM 302 <sup>9</sup> ;<br>ES/WGS 350; PHIL 323 or PHIL 339 or PHIL 341; STAT 313. | 12        |
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# ECOLOGY, EVOLUTION, BIODIVERSITY, AND CONSERVATION

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| BIO 363 Principles of Conservation Biology   | 4         |
| LA/NR 218 or GEOG 318 Applications in GIS <sup>11</sup>  | 3         |
| <b>Biodiversity</b> <sup>10,11</sup><br>BIO 321, 322, 323, 324, 335, 336; BOT 313, 433; MCRO 224;<br>MSCI 437  | 12        |
| <b>Ecology &amp; Evolution</b> <sup>11</sup><br>BIO 415, 442, 444, 445, 446; BOT 326; MCRO 436; MSCI 300   | 4         |
| <b>Conservation</b> <sup>10,11</sup><br>BIO 427; MSCI 428, 439; NR 416   | 4         |
| <b>Approved Electives</b> <sup>1,5</sup><br>ASCI 239; BIO 300 <sup>8</sup> , 321, 322, 323, 324, 327, 329, 330, 335,<br>336, 400 <sup>8</sup> , 415, 419, 427, 429, 434, 435, 442, 444, 445, 446, 450 <sup>8</sup> ,<br>461 <sup>7</sup> , 462 <sup>7</sup> , 463; BOT 311, 323, 326; GEOG 440; MCRO 224,<br>436; MSCI 300, 324, 428, 437, 439; NR 141, 142, 404, 416, 418,<br>425; ENGR 322/SCM 302 <sup>9</sup> ; STAT 313, 324 or 334, 330, 331,<br>416, 419, 421 | 16        |
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<sup>1</sup> Consultation with advisor is recommended prior to selecting electives; bear in mind your selection may impact pursuit of post-baccalaureate studies and/or goals.

<sup>2</sup> Excess units will be applied to Approved Electives.

<sup>3</sup> Recommended for students interested in health science careers.

<sup>4</sup> Excess units will be applied to 300-400 level Approved Electives.

<sup>5</sup> If a course is taken to meet a Major or Support requirement, it cannot be double-counted in the concentration.

<sup>6</sup> Taking a GE course that double-counts as an elective may cause an upper-division unit shortage. Use care to ensure that you have selected enough 300 and 400-level courses to meet the 60-unit Upper-Division Requirement, and that you meet the 180 units required for the degree.

<sup>7</sup> If BIO 461 or BIO 462 is used to meet the senior project requirement, it cannot also be counted as an elective.

<sup>8</sup> Maximum of 6 units may be applied toward Approved Electives from: BIO 200, 300, 400, 450, 485, 495.

<sup>9</sup> Maximum of 2 units may be applied towards Approved Electives from ENGR 322/SCM 302.

<sup>10</sup> Students seeking certification (i.e. as an Associate Wildlife Biologist from the Wildlife Society) should see their faculty advisor for guidance.

<sup>11</sup> Excess units will be applied to subsequent concentration electives.

<sup>12</sup> Consult with your faculty advisor for approval to use other relevant upper-division coursework in other departments.