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| Name: Click or tap here to enter text. | UWM ID: Click or tap here to enter text. |

**FIRST YEAR**

BioSci Faculty Advisor: Dr.

University of Wisconsin Milwaukee

Major in Biological Science
Cell & Molecular Biology (CMB)Option

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| **FALL**1. *Example: BioSci150 - 4 cr*
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BioSci Total Credit BioSci >300 level  | **SPRING**1. Click or tap here to enter text.
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BioSci Total Credit BioSci >300 level  |

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| **Requirements**  |
| * 34 BioSci credits (150, 152 are the only 100-level course that count toward the major)
 |
| * 4 lab courses total (including 150, 152, plus gateway and elective courses with laboratory components)
 |
| * At least 26 credits in BioSci courses number 300 or greater
 |
| * At least 2.0 GPA in BioSci courses for major
 |
| * At least 3.75 GPA in BioSci courses for honors in the major
 |

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| **FOUNDATIONS:** Required for all majors. Take sequentially. |
| [ ]  BioSci 150 | [ ]  BioSci 152 | [ ]  BioSci 325 |

**REQUIRED GATEWAY COURSES:**

**SOPHMORE YEAR**

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| [ ]  BioSci 315 | [ ]  BioSci 316 |

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| **RESEARCH REQUIREMENT:** Take at least one |
| [ ]  **\***BioSci 670 | [ ]  BioSci 697 |
| [ ]  BioSci 672 |  |

**\***If section is offered by a CMB faculty/staff member

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| **CHEMISTRY COURSES:** Take both Gen Chem courses. Chose Sequence I or II of Organic Chem. |
| **Gen Chem:** | **Organic Chem:** |
| [ ]  Chem 102 |  **Sequence I or Sequence II** |
| [ ]  Chem 104 | [ ]  Chem 341 | [ ]  Chem 343 |
|  | [ ]  Chem 342 | [ ]  Chem 344 |
|  |  | [ ]  Chem 345 |

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| **MATH REQUIREMENTS:** Take at least one semester of Calculus (Math 211, 213, 221, or 231). The 2nd semester of math may be fulfilled by Math 232, BioSci 465 or MthStat 215. |
| [ ]  Calculus \_\_\_\_\_\_\_\_\_\_\_\_\_ | [ ]  \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **PHYSICS:** Choose one sequence  |
| **Sequence I: or Sequence II: or Sequence III:** |
| Lecture | Lab (at least one) | Lecture | Lab (at least one) | Combined |
| [ ]  Phys 120 | [ ]  Phys 121 | [ ]  Phys 209 | [ ]  Phys 214 | [ ]  Phys 219  |
| [ ]  Phys 122 | [ ]  Phys 123 | [ ]  Phys 210 | [ ]  Phys 215 | [ ]  Phys 220 |

**GENERAL EDUCATION REQUIREMENTS**

**JUNIOR YEAR**

See L&S advisor for additional L&S/University requirements for
the degree pathway.

**Faculty Advisor’s Notes/Comments:** Click or tap here to enter text.

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BioSci Total Credit BioSci >300 level  | **SPRING**1. Click or tap here to enter text.
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BioSci Total Credit BioSci >300 level  |

**SENIOR YEAR**

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BioSci Total Credit BioSci >300 level  | **SPRING**1. Click or tap here to enter text.
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BioSci Total Credit BioSci >300 level  |

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BioSci Total Credit BioSci >300 level  | **SPRING**1. Click or tap here to enter text.
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BioSci Total Credit BioSci >300 level  |

**TOTALS:**

BioSci Total Credit BioSci >300 level

***Revised: 6/27/23***

**Fall Semester Courses**

**Spring Semester Courses**

**Course (cr) Course Name**

BioSci 150 (4) Foundations of Bio Sciences I **(L,N,Su)**

BioSci 152 (4) Foundations of Bio Sciences I **(L,N,Su)**

BioSci 203 (4) Anatomy & Physiology II **(L,N,Su)**

BioSci 315 (3) Cell Biology **(N)**

BioSci 316 (2) Lab in Genetics & Cell Bio **(L,N)**

BioSci 325 (4) Genetics **(N,Su)**

BioSci 335 (3) Mammalian Reproductive Biology

BioSci 383 (4) General Microbiology **(L)**

BioSci 455 (3) Cell/Molecular/Developmental Neurobiology **(N)**

BioSci 489 Internship Bio Sci Upper**\***

BioSci 500 (3) Plant Physiology

BioSci 529 (3) Molecular Biology of Microorgansims

BioSci 544 (3) Trans Electron Microscopy Lab **(L,N)**

BioSci 566 (3) Cell Biology of Human Disease **(N)**

BioSci 572 (3) Functional Genomics **(N)**

BioSci 580 (4) Experimental Microbiology **(L)**

**CMB MAJOR IN BIOLOGICAL SCIENCES - COURSES BY SEMESTER**

**Course (cr) Course Name**

BioSci 150 (4) Foundations of Bio Sciences I **(L,N,Su)**

BioSci 152 (4) Foundations of Bio Sciences I **(L,N,Su)**

BioSci 203 (4) Anatomy & Physiology II **(L,N,Su)**

BioSci 315 (3) Cell Biology **(N)**

BioSci 316 (2) Lab in Genetics & Cell Biology **(L,N)**

BioSci 325 (4) Genetics **(N,Su)**

BioSci 356 (3) Developmental Biology **(N)**

BioSci 370 (3) Mammalian Physiology **(N)**

BioSci 383 (4) General Microbiology

BioSci 401 (3) Immunology

BioSci 405 (3) General Virology

BioSci 489 Internship Bio Sci Upper**\***

BioSci 490 (3) Molecular Genetics **(N,1)**

BioSci 498 (3) Genetics of Development & Cancer

BioSci 501 (3) Aquatic & Plant Ecophysiology Lab **(L,3)**

BioSci 535 (3) Bacterial Pathogenesis

BioSci 539 (4) Lab Techniques Molecular Biology **(L,N)**

BioSci 540 (3) Microbial Diversity

BioSci 542 (3) Biological Electron Microscopy **(N)**

BioSci 543 (2) Scan Electron Microscopy Lab **(L,N)**

BioSci 564 (3) Endocrinology **(N,3)**

BioSci 565 (3) Gene Regulation in StemCells & Regeneration **(N,2)**

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| **Pre-Requisites** |
| BioSci 150 Foundation of Biological Sciences I, *(P: Chem 100(P) or 102(P) or conc reg)*BioSci 152 Foundation of Biological Sciences II, *(P: C or better in BioSci 150(P))*BioSci 203 Anatomy & Physiol *(P: 202 or 315)*BioSci 315 Cell Biology, *(P: C or better in BioSci 152(P) & Chem 104(P)*BioSci 316 Lab in Genetics & Cell Biol *(P: 152 & Chem 104, Bio 315 or 325)*BioSci 325 Genetics *(P: 150; 152 or 203; Chem 104)*BioSci 335 Mammalian Repro Biol *(C or better in 315(P); cons. istr.)*BioSci 356 Developmental Biology *(P: 315 or 325)*BioSci 370. Mammalian Physiology *(P: 315)*BioSci 383 Microbiology *(a grade of C or better in BioSci 152(P); BioSci 325(C) or cons. of istr.; Chem 341(C) or Chem 343 (C))*BioSci 401 Immunology *(jr st; grade of C or better in BioSci 315(P) or 325(P); Chem 341(P) or 343(P); or cons instr.)*BioSci 405 General Virology *(jr st; BioSci 325(P); BioSci 315(P) or 383(P); Chem 501(R))*BioSci 455 Cellular, Molecular & Developmental Neuro, credits *(P: jr st; C or better in BioSci 315(P))* | \*BioSci 489 Internship in Biological Science, Upper division *(jr st; 300-level or above course in Bio Sci; 2.50 gpa; consent of supervising faculty member)*BioSci 490 Molecular Genetics *(P: Jr st, 325; 315 & 316)*BioSci 498 Genetics of Development & Cancer *(jr. st. and a grade of C or better in BioSci 325(P))*BioSci 501 Aquatic & Plant Ecophysiology Lab *(jr st; BioSci 325(P) or 310(P))*BioSci 529 Mol Bio of Microorg *(jr. st., 383 (P))*BioSci 535 Bacterial Path *(jr st, C or better in BioSci 383(P))*BioSci 539 Lab Tech in Molec Biol *(P: jr st, 315 or 325)*BioSci 542 Electron Microscopy *(P: Jr st, 315 & 316)*BioSci 543 Scanning Electron Microscopy Lab *(P: Jr st; 542 & consent)*BioSci 544 Transmission Electron Micro Lab *(P: Jr st, 542, consent)*BioSci 564 Endocrinology *(P: Jr st, 315, Chem 103/341/343)*BioSci 565 Gene Regulation in Stem Cells and Regeneration *(P: Jr st, 315 or 325)*BioSci 566 Cell Biology of Human Disease *(P: Jr st, 315)*BioSci 572 Functional Genomics *(P: Jr st, 325)*BioSci 580 Experimental Micro *(jr st, BioSci 383(P))*BioSci 672 Undergraduate Seminar in Cell & Molecular Biol *(P: Sr st; BioSci 315(P) & 316(P))*BioSci 697 Independ. Study in Cell & Molec. Biol *(P: jr st; BioSci 315(P) & 316(P); 2.5 gpa;* consent of supervising faculty member*)* |

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| **Abbreviations** |
| **(L)** Course will count toward the four-lab requirement **(N)**  Counts for Neuroscience Double Major **(Su)** Courses that are also offered in the summer  | **(1)** Course typically offered odd years**(2)** Course typically offered even years**(3)** Course offered irregularly |