**LOWER DIVISION MAJOR PREPARATORY REQUIREMENTS (Life Science Core Curriculum)**

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| Life Sciences 7A, 7B, 7C, 23L OR 1, 2, 3, 4, 23L (if completed before 2017-18) |  |
| Chemistry 14A, 14B, 14BL, 14C, 14D OR 20A, 20B, 20L, 30AL, 30A, 30B |  |
| Life Sciences 30A, 30B, OR Mathematics 3A, 3B, 3C OR Mathematics 31A/31AL, 31B, 32A |  |
| Life Sciences 40 OR Statistics 13 (*Note: Should only take LS 40 if LS 30A/30B were completed.*)  |  |
| Physics 5A, 5B, 5C OR 1A, 1B, 1C, 4AL, 4BL |  |

**UPPER DIVISION (UD) MAJOR REQUIREMENTS – CORE PRINCIPLES**

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| **EVOLUTION & GENETICS** | **Ecology & Evolutionary Biology** 103, 108, 109, 109L, 110, 111, 112, 113A, 113AL, 114A, 115, 117, 118, 120 **(**or 185), 121, C126, 129, 130, C135, 136, 140, 144*,* M145 (same as EPSS M118), 149, 150, 160, 171, C174, CM173, 175, 181*,* 184, 185, 186**Anthropology** 120, 124P, 124Q, 124S, 128P**Earth & Planetary Sciences** 116**Life Science** 107**Microbiology, Immunology, & Molecular Genetics** CM156, 158**Molecular, Cell, & Developmental Biology** 138, CM156**Society & Genetics** M142 |
| **INFORMATION FLOW** | **Ecology & Evolutionary Biology** 100, 100L, 116, 120 (or 185), 121, 122, 125, C126, 129, 132**\*,** 134B, C135, 136*,* 137, 149, 150, 153, 156, 162, 162L*,* 170, 171, C172, C174, 176, M178 (same as C&S BIOL M186), C179, 180A, 180B, 183**Anthropology** 124P, 128P**Chemistry** C100, 153A, 166**Life Science** 107**Microbiology, Immunology, & Molecular Genetics** 100L, 101, 103AL, 103BL, 109AL, 109BL, 123, 132, CM156, 158, C185A**Molecular, Cell, & Developmental Biology** 100, 138, 143, 144, C150, 150AL, CM156, 165B, 168, M175A, M175B, M175C, 187AL**Neuroscience** M101A, M101B, M101C, 102**Physiological Sciences** M106, 111A, 111B, CM123, 124, C126, C127, 128, C130, 136, 138, M140, C144, M145, 146, 147, 149, C152, 154, 155, 165, 166*,* 167, 173, 174, 175, M176, 177, M180A, M180B, M180C **\*Offered only as part of the FBQ,**  |
| **STRUCTURE FUNCTION** | **Ecology & Evolutionary Biology** 101, 102**\***, 103, 105*,* 106**\***, 107, 109, 109L**,** 110, 111, 112, 113A, 113AL*,* 113B\*, 114A*,* 114B\*, 115, 117*,* 118, 121, 122, 123A**\***, 123B**\***, 124A**\***, 125, M127, M127L, *128,* 129, M131 (same as GEOG M117), 136, 140, 144*,* M145 (same as EPSS M118), 147, 148, 151A, 151B**\***, 152, 155, M157, 160, 161, 162, 162L, 163**\***, 164**\*,** 165**\***, 166\*, 170 (or PHYSCI 166), 171, *C174,* *181,* 184**Chemistry** C105, 153A, 153D, 153L**Earth & Planetary Sciences** 116**Geography** 108, 111, 112**Microbiology, Immunology, & Molecular Genetics** 100L, 101, 103AL, 103BL, 109AL, 132, CM156, 158, 168, C185A **Molecular, Cell, & Developmental Biology** 100, 138, M140, C141, 143, 144, 146, C150, 165A, 165B, 168, M175A, M175B, M175C**Neuroscience** M101A, M101B, M101C, *102***Physiological Sciences** 107, 108, 111A, 111B, 120, 121, 122, CM123, 124, C126, C127, 128, C130, 136, 138, M140, C144, M145, 146, 147, 149, C152, 153, 154, 155, 165, *166***\***\*\*, 167, 173, 174, 175, M176, 177, M180A, M180B, M180C**\*Only offered as part of the FBQ/MBQ/FMBQ** |
| **TRANSFORMATIONS OF ENERGY & MATTER** | **Ecology & Evolutionary Biology** 103*,* 109, 109L, 123A**\***, 123B**\***, 124A**\***, M131 (same as GEOG M117), M139, M151A, 153, 161, 162, 162L, 170, 184, **Atmospheric & Oceanic Sciences** 102, 103, 104, M105, 130, 145 **Chemistry** 103, 110A, 110B, 114, C123A, C123B, 136, C143A, C143B, 144, C145, 153A, 153B, 153C, 153D, 153L, 154, C159, C164 **Environmental Health Sciences** 100**Microbiology, Immunology, & Molecular Genetics** 101**\*Courses offered only as part of FBQ, MBQ, or FMBQ** |
| **SYSTEMS** | **Ecology & Evolutionary Biology** 101*,* 102, 105, 106**\***, 107, 108, 110, 111, 112, 113A, 113AL, 113B**\***, 114A, 114B**\***, 115*,* 116, 117, C119A, C119B, 120 (or 185), 122, 123A**\***, 123B**\***, 124A**\***, 124B**\***, 125, C126, M127, M127L, 128*,* 129, M131 (same as GEOG M117), 132**\***, 133*,* 136, 137, M139, 140, 142, 144, 147, 148, 149, 150, 151A, 151B**\***, 152, 153, 154, 155, 156, 160, 161, 162, 162L, 163**\***, 164**\***, 165**\***, 166**\***, 170, C172, 176, C177, M178 (same as C&S BIOL M186), C179, 180A (2 units), 180B, 182**\***, 183, 184**Anthropology** 124P, 128P**Atmospheric & Oceanic Sciences** 102, 103, 104, M105, 130, 145, **Biostatistics** 100B**Chemistry** 103, 153A, 153L**Environmental Health Sciences** 100**Earth & Planetary Sciences** 116**Geography** 108, 111, 112**Life Science** 107, M174**Microbiology, Immunology, & Molecular Genetics** 100L, 101, 103AL, 103BL, 105, 109AL, 109BL, 123, 132, C134, 158, 168, 180A, 180B, C185A**Molecular, Cell, & Developmental Biology** 100, 138, M140, C141, 143, 144, 146, C150*, 150AL*, CM156, 160, 165A, 165B, 168, M175A, M175B, M175C, 187AL**Neuroscience** M101A, M101B, M101C, *102***Physiological Sciences** 100, M106, 107, 108, 111A, 111B, 120, 121, 122, CM123, 124, C126, C127, 128, C130, M135, 136, 138, M140, C144, M145, 146, 147, 149, C152, *153*, 154, 155, 165, *166*, 167, 173, 174, 175, M176, 177, M180A, M180B, M180C**Psychology** 115, 133B**Society & Genetics** M142**\*Courses offered only as part of FBQ, MBQ, or FMBQ** |

**RULES FOR NEW BIOLOGY MAJOR**

* All Life Science Core Curriculum courses must be passed with a letter grade of C- or better and must be completed with an overall GPA of 2.00 (C) or better. Students receiving a grade below C- in three core curriculum courses, either in separate courses or repetitions of the same course, are ineligible to pursue the Biology major.
* For the upper division (UD) major requirements, you must pass each course with a letter grade of D- or better. However, in order to graduate, you are required to maintain a global GPA (UD major requirements) of 2.00 or better.
* A maximum of four (4) units of graduate work may be applied on the major, BUT only if approved by the department.
* Two courses from each Core Principle are required.
	+ Courses applied to the upper division (UD) major requirements may be applied to ONE Core Principle only. Courses listed in multiple categories MAY NOT be applied to multiple Core Principles simultaneously.
	+ Minimum of 5 Upper Division courses for the major must be taken within the EE BIOL Department.
	+ Minimum of 2 lab courses must be taken toward the degree, including a minimum of 1 Upper Division EE BIOL lab course.
		- In order to receive lab credit for EEB 100L, 109L, 113AL, or 162L, the corresponding lecture course (EEB 100, 109, 113A, and 162, respectively) must be completed, either as a pre-requisite or as a co-requisite. The lecture course may be applied to a separate Core Principle.
		- MIMG 101 + MIMG 100L - in order to receive lab credit for MIMG 100L, MIMG 101 must also be completed, either as a pre-requisite or as a co-requisite. However, MIMG 100L cannot be applied as a separate Core Principle since it is only three (3) units.
* Credit deductions: students cannot take the following pairs of courses:
	+ EE BIOL 120 & 185
	+ EE BIOL 170 & PHYSCI 166
	+ MCD BIOL 100 & 165A
* FBQ/MBQ instructors determine which Core Principles their courses will help complete Upper Division requirements for the major (4 requirements total).
* A maximum of four (4) units of EE BIOL 199 OR eight (8) units of EE BIOL 198A & 198B may be applied to the major. Credit for 199 courses from other departments may NOT be applied. NO EXCEPTIONS TO THIS POLICY.
	+ Each Primary Investigator (PI) will sign off on a form stating which Core Principle the student’s research course should count for, after the student’s work and quarter are completed. The research course must be for a minimum of 4 units.
* Each course applied toward the UD major requirements must have a minimum of four (4) units. Courses with fewer than four units may be combined to equal one (1) course equivalent, IF they are applicable to the major (e.g., EE BIOL 180, EE BIOL 188). Thus, two (2) courses worth 2 units each (for a total of 4 units) could equal one course requirement on the major. A maximum of one (1) course on the major is allowed in cases where two 2-unit courses are combined to equal one course equivalent. A six-unit course counts as one course on the requirements for the major.
* Regarding classes offered by Molecular, Cell & Developmental Biology and Physiological Science (Department of Integrative Biology & Physiology, IBP): enrollment in ALL upper division (UD) Physiological Science courses will be restricted to their majors during first pass. You must consult the IBP department about enrollment in courses during second pass for UD elective Physiological Science courses. Non-Physiological Science majors are restricted from enrolling in PHYSCI 107 and 111A/B at ALL TIMES.

**Departmental Honors**

* An overall GPA of 3.400 and a global GPA of 3.400 in the major are required for graduation with honors in Biology. Highest honors in Biology are awarded to students whose global and overall GPA are 3.600 at graduation and who have satisfactorily completed EE BIOL 198A & 198B. Students do not need to apply for departmental honors. All students are reviewed for honors following the receipt of final transcripts.