B.S. in MICROBIOLOGY

Suggested 4-Year Academic Flowchart



Undated 7/16/2015 FRESHMAN SOPHOMORE JUNIOR SENIOR Spring Fall Spring Spring Spring Fall Advisor Introductory Diversity and Intro to Cell and Principles of Senior Project - Research Proposal Ecology and Organic Chemistry Approved History of Life Molecular Biology Microbiology I 1icrobiology 1 Genetics Evolution Elective BIO 461 or 462 (2) BIO 161 (4) MCRO 224 (5) BIO 351 (5) BIO 160 (4) MCRO 225 (5) BIO 263 (4) $(4)^{2}$ CHEM 217 (3) BIO 161; CHEM 216 Recom: CHEM 110 IO 161 and CHEM 111, 124, or 127) (BIO 160 or 161) 111, 124, or 127. CHEM 216 w/min C IO 263; STAT 217 (MCRO 224) Recom: CHEM 128) Coreq: CHEM 220) 218) [B2/B4] Advisor Advisor Advisor Advisor General Chemistry General Chemistry General Chemistry Organic Chemistry Biochemistry Organic Chemistry Approved Approved Approved Microbial Approved for Agriculture and for Agriculture and for Agriculture and Lab for Life Elective Elective Elective Microbiology Physiology Elective Life Science I Life Science II Life Science III Sciences II CHEM 313 or $(4)^{2}$ $(4)^{2}$ $(4)^{2}$ $(3)^{2}$ CHEM 216 (5) CHEM 220 (1) MCRO 423 (5) MCRO 424 (5) CHEM 127 (4) CHEM 128 (4) CHEM 129 (4) 371 (5)³ (Jr Standing; MCRO (CHEM 127 or AP (CHEM 126 or 129 MCRO 225; CHEM (Coreq: CHEM 217) 225; CHEM 216, 312, or 316; Instr consent (CHEM 128) CHEM score of 5) w/min C-) 313 or 371) [B3/B4] Applied Statistics Cell Biology General Virology Immunology Calculus for the College Physics I for the Life College Physics II College Physics III Life Sciences I Sciences BIO 452 (4) MCRO 402 (4) BIO 426 (4) MATH 161 (4) STAT 218 (4) PHYS 121 (4) PHYS 122 (4) PHYS 123 (4) (BIO 351 or CHEM (BIO 351 or CHEM 3IO 351 or CHEM 373. Recom: CHEM 313 or 371) GE (4) 73; CHEM 216, 312 (PHYS 118, 121, MATH 118 or MATI PHYS 118 121 131 373. Recom: BIO 316. Recom: CHEN 119) or 141) 313 or 371) [B1] [B1] PHYS 122) Expository Writing ENGL 133/134 (4)** Can be taken anytime during Freshman Year **GE (4) GE (4)** GE (4) GE (4) GE (4) GE (4) GE (4) Oral Communication COMS 101/102 (4)** [A2] Can be taken anytime during Fresh GE (4) GE (4) GE (4) Free Elective **Free Elective** Free Elective Free Elective (1)¹ $(2)^{1}$ (1)1 $(4)^{1}$ Graduation Writing Requirement GWR* Reasoning, Argumentation, & Writing [A3] COMS 126; COMS/ENGL 145; ENGL 148; PHIL 126 (4)** Students can attempt to fulfill the requirement after 90 earned units (Completion of GE A1 with a C- or better students should complete the requirement before senior year) Can be taken anytime between Winter of Freshman and Winter of Sophomore Year 14 14 17 17 14 16 13 16 16 15 13 15 TOTAL: 180 Notes: Legend:

MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET

- * Refer to current catalog for prerequisites.
- ** One course from each of the following GE areas must be completed: A1, A2, A3, C1, C2, C3, C4, C1-C5 elective, D1, D2, D3, D4, D5 and F.
- C4, D5 and F should be taken only after Junior standing is reached (90 units).

Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR).

USCP requirement can be satisfied by some (but not all) courses within GE categories: C3, C4, D1, D3, D4, D5 or F.

- 1 8 units of elective credit required. Recommended: SCM 150 workshops (1) for Math/Science courses be taken in your first year.
- ² To be chosen with faculty advisor approval. Total of 19 units required. Limited to a total of 4 units from BIO 400, 450, 462, 463. Care must be taken to ensure compliance with the "60 units of upper-division" requirement.
- 3 CHEM 371 suggested for students who plan to pursue graduate school or a health professions career.

