College of Letters and Science

Biology Core Courses (11-12 credits)

- BIO 105 B Biological Concepts (4) __
- OR
- BIO 108 F Honors: Concepts in Bio (5) __
- BIO 323 B Intro Molecular and Cell Bio (3) __
- (BIO 105, CHEM 105 and/or c/enrollment in CHEM 106, OR CHEM 101, 102 w/B)
- BIO 343 B Genetics (BIO 323) (4) __
- BIO 491 B Senior Survey *** (0) __

*** Senior Students, during their last semester, will take a general biology/microbiology assessment exam and fill out a survey to express their opinion of the biology/microbiology program. Tests/surveys will be taken in the Testing Center at the student’s convenience, (but during normal Testing Center hours). Completion of the test/survey is a requirement for graduation.

Additional Required Courses (15 credits)

- BIO 211 B Human Anatomy (NS) **** (3) __
- OR
- BIO 308 S Comparative Anatomy (NS) (5) __
- AND
- BIO 233 B Microbial Survey (NS)(BIO 105 w/C) (4) __
- OR
- BIO 309 B Bacteriology (NS)(1 term gen bio) (5) __
- AND
- BIO 349 B Ecology and Evolution (3) __
- AND
- BIO 319 B General Animal Physiology (BIO 323) (5) __
- CHEM 105 B General Chemistry I * (5) __
- CHEM 106 B General Chemistry II * (5) __
- CHEM 234 B Organic Chemistry I Lab (NS) (CHEM 106 w/C)(1) __
- CHEM 235 B Organic Chemistry I (NS) (CHEM 106 w/C) (3) __
- CHEM 334 B Organic Chemistry II Lab (NS)(CHEM 235 w/C)(1) __
- CHEM 335 B Organic Chemistry II (NS) (3) __
- (CHEM 235 w/C)
- CHEM 303 B Biochemistry: Clinical Emphasis (CHEM 335) (3) __

**** will become four credits in Fall 2013

Electives (10 credits)

- BIO 300 B Internship in Biology (1-6) __
- BIO 301 B Internship in Microbiology (1-6) __
- BIO 303 F Intro to Epidemiology (BIO 105) (2) __
- BIO 306 S Neurobiology (BIO 105) (3) __
- BIO 308 S Comparative Anatomy (NS) (5) __
- BIO 309 B Bacteriology (NS)(BIO 105) (5) __
- BIO 310 F Biology of Gender(BIO 105, 211 OR 230 OR 308) (3) __
- BIO 312 S Medical Bacteriology Lecture (2) __
- (BIO 309, 341 C/312)
- BIO 313 S Medical Bacteriology Lab (NS) (2) __
- (BIO 309, 341, C/312)
- BIO 315 S Virology (BIO 323) (3) __
- BIO 316 S Developmental Biology (BIO 323) (3) __
- BIO 321 F Mycology (NS) (BIO 105) (3) __
- BIO 338 S Environmental Toxicology (BIO 105) (2) __
- BIO 341 F Immunology (BIO 233, 309) (3) __
- BIO 344 F Intro to Hematology (BIO 341) (3) __
- BIO 354 S Parasitology (NS)** (3) __
- BIO 372 S Medical and Environ App of Cell Bio & Gen (3) __
- BIO 374 F Cell/Immunology Lab (NS) (C/BIO 341 or 372) (3) __
- BIO 389 S Principles of Biotechnology (BIO 323, 343) (3) __
- BIO 390 S* Biotechnology Lab (NS) (BIO 309) (2) __
- BIO 446 B Independent Study (5) __

(A max of six credits from BIO 446/456 can be counted towards a Biology or Microbiology degree.)

- BIO 456 B Related Readings **** (1-3) __

One extra-departmental course from the following

** May be counted as an elective

- CHEM 304 Biochemistry Lab (NS) (C/CHEM 303) (1) __
- CHEM 315 Advanced Biochemistry (CHEM 303 w/C) (3) __
- KINESIOL 348 Biomechanics (KINESIOL 122, BIO 211, C/212) (3) __
- KINESIOL 350 Physiology of Exercise (KINESIOL 122, BIO 211, 212)
- PSYCH 367 Psychopharmacology (6 cr of PSY) (3) __
- PSYCH 383 Biological Psychology (3) __
- (PSYCH 101, 104 OR 110 and 1 year of laboratory bio)
- PSYCH 384 Biological Psychology Lab (3) __
- (PSYCH 101, 104 OR 110 & 1 yr lab bio)
- PSYCH 456 Related Reading (1-3) __

Required courses that contribute to General Education (9 credits)

- MATH meet COLS BS requirements
- PSYCH 101 General Psychology (SS) (3) __

** Plus one of the following

- PSYCH 220 Health Psychology (SS)** (3) __
- PSYCH 271 Cross-Cultural Psychology (ES)(SS) (3) __
- (PSYCH 101, 104 OR 110 w/C)
- PSYCH 303 Psych of Abnormal Behavior(SS) (3) __
- PSYCH 310 Comparative Psychology ** (3) __
- PSYCH 331 Infant and Child Development (SS) (3) __
- (PSYCH 101, 104 OR 110)
- PSYCH 338 Adult Development and Aging (SS) (3) __
- (PSYCH 101, 104 OR 110)
- PSYCH 355 Psychology of Adolescence (SS) ** (3) __
- PSYCH 390 Sport Psychology (SS)** (3) __

**(PSYCH 101, 104 OR 110)

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Must also meet General Education and Degree Requirements to earn BS Degree.