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**Healthcare Science**

**58 credit min**

**Effective for Spring 2013**

**Biology Core Courses (11-12 Credits)**

|  |  |  |  |
| --- | --- | --- | --- |
| BIO 105 | Biological Concepts(NS)(XL) | B | (4) \_\_\_\_ |
| **OR** |  |  |  |
| BIO 108 | Honors: Concepts in Bio(NS)(XL) | F | (5) \_\_\_\_ |
| BIO 323 | Intro Molecular & Cell Bio  (Bio 105, Chem 105 and/or C/Chem 106, or Chem 101,102 w/B) | B | (3) \_\_\_\_ |
| BIO 343 | Genetics (NS)(Bio 323) | B | (4) \_\_\_\_ |
| BIO 491 | Senior Survey\*\*\* | B | (0) \_\_\_\_ |

**Additional Required Biology Courses (16-17 Credits)**

|  |  |  |  |
| --- | --- | --- | --- |
| BIO 211 | Human Anatomy (NS)(XL)(Bio 105 w/C) | B | (4) \_\_\_\_ |
| **OR** |  |  |  |
| BIO 308 | Comparative Anatomy (NS)(Bio 105 and 1 year gen Chem) | B | (5) \_\_\_\_ |
| **AND** |  |  |  |
| BIO 233 | Microbial Survey (NS)(XL)(Bio 105 w/C) | B | (4) \_\_\_\_ |
| **OR** |  |  |  |
| BIO 309 | Bacteriology (NS)(Bio 105 and 1 year gen Chem) | B | (5) \_\_\_\_ |
| **AND** |  |  |  |
| BIO 319 | General Animal Physiology (NS)(1 year Chem, Bio 323) | B | (5) \_\_\_\_ |
| **AND** |  |  |  |
| BIO 349 | Ecology and Evolution (1 term gen Bio) | B | (3) \_\_\_\_ |

**Required Chemistry and Math Courses (21 Credits)**

|  |  |  |  |
| --- | --- | --- | --- |
| CHEM 105 | General Chemistry I (NS)(XL) | B | (5) \_\_\_\_ |
| CHEM 106 | General Chemistry II (NS)(XL) | B | (5) \_\_\_\_ |
| CHEM 234 | Organic Chemistry Lab I (Co-req Chem 235) | B | (1) \_\_\_\_ |
| CHEM 235 | Organic Chemistry I (NS)(Chem 106 w/C)(Co-req Chem 234) | B | (3) \_\_\_\_ |
| CHEM 303 | Biochemistry: Clinical Emphasis (Chem 335) | B | (3) \_\_\_\_ |
| CHEM 334 | Organic Chemistry Lab II (Chem 234, 235 w/C)(Co-req Chem 335) | B | (1) \_\_\_\_ |
| CHEM 335 | Organic Chemistry II (NS)(Chem 235 w/C)(Co-req Chem 334) | B | (3) \_\_\_\_ |
| MATH | Meet COLS BS requirements |  | ( ) \_\_\_\_ |

**Required courses that contribute to General Education (6 Credits)**

|  |  |  |  |
| --- | --- | --- | --- |
| PSYCH 101 | General Psychology (SS)(XS) |  | (3) \_\_\_\_ |
| **OR** |  |  |  |
| PSYCH 102 | General Psychology: Ethnic Studies (ES)(SS)(XS) |  | (3) \_\_\_\_ |

**Plus one of the following**

|  |  |  |  |
| --- | --- | --- | --- |
| PSYCH 220 | Health Psychology (SS)(Psych 101, 104 or 110) |  | (3) \_\_\_\_ |
| PSYCH 271 | Cross-Cultural Psychology (ES)(SS)(XS)(Psych 101, 104 or 110 w/C) |  | (3) \_\_\_\_ |
| PSYCH 303 | Psychology of Abnormal Behavior (Psych 101, 104 or 110) |  | (3) \_\_\_\_ |
| PSYCH 310 | Comparative Psychology (6 cr of Psych including 101, 104 or 110) |  | (3) \_\_\_\_ |
| PSYCH 331 | Infant and Child Development (SS)(Psych 101, 104, or 110) |  | (3) \_\_\_\_ |
| PSYCH 338 | Adult Development and Aging (SS)(Psych 101, 104 or 110) |  | (3) \_\_\_\_ |
| PSYCH 355 | Psychology of Adolescence (SS)( Psych 101, 104 or 110) |  | (3) \_\_\_\_ |
| PSYCH 380 | Cognitive Psychology (Psych 101, 104 or 110) |  | (3) \_\_\_\_ |
| PSYCH 390 | Sport Psychology (SS)( Psych 101, 104 or 110) |  | (3) \_\_\_\_ |
| PSYCH 391 | Developmental Psychology (Psych 101, 104 or 110) |  | (3) \_\_\_\_ |

**Biology Electives (10 Credits from these courses if not used to fill preceding requirements)**

|  |  |  |  |
| --- | --- | --- | --- |
| BIO 300 | Internship in Biology | B | (1-6) \_\_\_\_ |
| BIO 301 | Internship in Microbiology | B | (1-6) \_\_\_\_ |
| BIO 303 | Introduction to Epidemiology (Bio 105) | F | (2) \_\_\_\_ |
| BIO 306 | Neurobiology (Bio 105) | S | (3) \_\_\_\_ |
| BIO 308 | Comparative Anatomy (NS)(1 term general Bio) | S | (5) \_\_\_\_ |
| BIO 309 | Bacteriology (NS)(Bio 105 and 1 year gen Chem) | B | (5) \_\_\_\_ |
| BIO 310 | Biology of Gender (Bio 105 and either Bio 211 or 230 or 308) | S | (3) \_\_\_\_ |
| BIO 312 | Medical Bacteriology Lecture (Bio 309 and 341) | S | (2) \_\_\_\_ |
| BIO 313 | Medical Bacteriology Lab (NS)(Bio 309 and 341, C/Bio 341) | S | (2) \_\_\_\_ |
| BIO 315 | Virology (Bio 323) | S | (3) \_\_\_\_ |
| BIO 316 | Developmental Biology (Bio 323) | S | (3) \_\_\_\_ |
| BIO 321 | Mycology (NS)(1 term gen Bio) | F | (3) \_\_\_\_ |
| BIO 338 | Environmental Toxicology (Bio 105) | S | (2) \_\_\_\_ |
| BIO 341 | Immunology (Bio 323) | F | (3) \_\_\_\_ |
| BIO 344 | Introduction to Hematology (Bio 341) | S | (3) \_\_\_\_ |
| BIO 354 | Parasitology (NS)(1 term gen Bio and Bio 230) | S | (3) \_\_\_\_ |
| BIO 372 | Med and Environmental Apps of Cell Bio & Genetics (Bio 323) | S | (3) \_\_\_\_ |
| BIO 374 | Cell/Immunology Lab (NS)(Bio 341 or 372) | F | (3) \_\_\_\_ |
| BIO 389 | Principles of Biotechnology (Bio 323 and 343) | S | (3) \_\_\_\_ |
| BIO 390 | Biotechnology Lab (NS)(Bio 309) | S | (2) \_\_\_\_ |
| BIO 446 | Independent Study\* | B | (1-3) \_\_\_\_ |
| BIO 456 | Related Readings\* | B | (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) | S | (3) \_\_\_\_ |
| KINES 280 | Biomechanics (Bio 211 and C/Bio 212) |  | (3) \_\_\_\_ |
| KINES 350 | Physiology of Exercise (Bio 212) |  | (3) \_\_\_\_ |
| PHY ED 375 | Lifespan Motor Development |  | (2) \_\_\_\_ |
| PSYCH 367 | Psychopharmacology (6 credits of Psych) |  | (3) \_\_\_\_ |
| PSYCH 383 | Biological Psychology (Psych 101, 104 or 110 & 1 yr lab bio) |  | (3) \_\_\_\_ |
| PSYCH 384 | Biological Psychology Lab (Psych 101, 104 or 110 & 1 yr lab bio) |  | (3) \_\_\_\_ |
| PSYCH 456 | Related Readings | B | (1-3) \_\_\_\_ |

Pre-requisites are in parentheses Approved: November 2011 Printed: March 2015

S = Spring

F = Fall

B = Both Fall & Spring

C/ = Concurrent enrollment

\*A maximum of six credits from BIO 446/456 combined can be counted towards degree and must be healthcare related

\*\*\*During their last semester senior students will take the senior survey course assessment exam and fill out a survey regarding their experience in the program. This will be taken in the Testing Center at the student’s convenience (during normal Testing Center hours). Completion is a graduation requirement.

**Must meet General Education and Degree Requirements to earn BS Degree**

Approved: November 2011 Printed: March 2015