BioMed Planning Worksheet: B.S., Biological Sciences, Biomedical Science Specialization
Revisions for 2017-2018 (120 hours)

Student Name: ____________________________________________________________

Email:_________________________________________ Matriculation Date: ____________

Faculty Mentor: ___________________________________ Home Dept. __________________

University Core Curriculum (see Undergraduate Catalog for list of course options): 39 hours

Foundation Skills

Composition (6 hours) University College (1 hour)

○ ___________________________ ○ UCOL 101 Foundations of Inquiry

○ ___________________________

Speech Communication (3 hours) Mathematics (3 hours)

○ CMST 101 (3 hours) ○ MATH 108 and 109, or 111 or 141 or 151

Disciplinary Studies

○ Fine Arts (3 hours) Science (6 hours)

______________________________ Group I: ○ CHEM 200 and 201

______________________________ Group II: ○ BIOL 211

○ Human Health (2 hours): PHSL 310

Humanities (6 hours) Social Science (6 hours)

○ ___________________________ ○ ___________________________

○ ___________________________ ○ ___________________________

Integrative Studies

○ Multicultural (3 hours): ________________________________

College of Science Requirements: 6 hours

Biological Sciences: completed with the Biological Sciences major
Mathematics: completed with the Biological Sciences major
Physical Sciences: completed with the Biological Sciences major

Supportive Skills: 6 hours chosen from the following

○ CS 105 Introduction to Application Software or CS 200B Computer Concepts or CS 201
Problem Solving with Computers or CS 202 Introduction to Computer Science [3]

○ ENGL 290 Intermediate Analytical Writing or ENGL 291 Intermediate Technical Writing; or
ENGL 391 Precision in Reading and Writing[3]

○ Two-semester sequence of a foreign language
Requirements for the Biological Sciences Major (Biomedical Science Track): 70-72 hours

**Biology Core:** 29 hours
- BIOL 211 Introductory Cell Biology and Genetics [1 (+ 3)]
- BIOL 212 Introductory Evolution and Ecology [4]
- BIOL 213 Introductory Organismal Biology [4]
- BIOL 305 Principles of Genetics [3]
- BIOL 306 Cell Biology [3]
- BIOL 409 Developmental Biology [3]
- BIOL 450 Biomedical Genetics [3]
- MICR 301 Principles of Microbiology [4]
- MICR 302 Molecular Biology [3]
- PHSL 310 Principles of Physiology [3(+2)]
- BIOL 485 Senior Seminar in Biomedical Science or MICR 495 Senior Seminar or PHSL 490 Senior Seminar or PLB 480 Senior Seminar or ZOOL 482 Zoology Seminar for Seniors [1]

**Physical Sciences:** 25 hours
- Chemistry: 12 hours
  - CHEM 200, 202 Intro. to Chemical Principles [1(+3)]
  - CHEM 210, 212 General and Inorganic Chemistry [4]
  - CHEM 301 General Chemistry Lab I [1]
  - CHEM 310 General Chemistry Lab II [1]
  - CHEM 340 Organic Chemistry I [3]
- Biological Chemistry: 5 hours
  - CHEM 442 Organic Chemistry II and CHEM 443 Organic Chemistry Laboratory II, or CHEM 350 Introduction to Biological Chemistry and CHEM 351 Biochemistry Laboratory
- Physics: 8 hours

**Mathematics:** 1-3 (+3) hours
- MATH 108 College Algebra and MATH 109 Trigonometry and Analytic Geometry, or MATH 111 Precalculus, or MATH 141 Short Course in Calculus for Biological Sciences, or MATH 150 Calculus I

**Statistics:** 3 hours
- QUAN 402 Basic Statistics or MATH 282 Intro. to Statistics or PLB 360 Intro. Biostatistics

**Life Science Electives:** choose 12 hours from the following
- BIOL 304 Evolution
- MICR 403 Medical Microbiology Lecture [3]
- MICR 421 Biotechnology [3]
- MICR 425 Biochem. Physiol. of Micro. [3]
- MICR 441 Viruses and Disease [3]
- MICR 453 Immunology Lecture [3]
- MICR 460 Bacterial and Viral Genetics [3]
- MICR 470 Prokaryotic Diversity [3]
- MICR 477 Microbial Ecology [3]
- MICR 480 Molec. Biol. Microorganism Lab [3]
- MICR 491 Diagnostic & Applied Micro Lab [3]
- PHL 301 Survey of Human Anatomy [4]
- PHL 320 Reproduction & Sexuality [3]
- PHL 401A, B Mammalian Physiology [4, 4]
- PHL 430 Cellular & Molecular Physiology [3]
- PHSL 433 Comp. Animal Physiol. [3]
- PHSL/ZOOL 434 Environmental Physiology [3]
- PHSL 450 Advanced Human Sexuality [3]
- PHSL 462 Biomedical Instrumentation [3]
- PHSL 470 Biological Clocks [3]
- PLB 317 Introduction to Medical Botany [4]
- PLB 419 Plant Molecular Biology [3]
- PLB 425 Environmental Physiology of Plants [4]
- PLB 427 Plant Biochemistry [4]
- PLB 455/ZOOL 450 Genome Evolution [3]
- PLB 471/ZOOL 472 Intro. to Systems Biology [3]
- PLB 475 Advanced Cell Biology [3]
- ZOOL 407 Parasitology [4]
- ZOOL 409 Vertebrate Histology [4]
- ZOOL 418 Vertebrate Anatomy Lab [3]
- ZOOL 426 Comparative Endocrinology [3]
- ZOOL 432 Principles of Toxicology [3]

**Free Electives** (3-5 hours)
- ____________________________
- ____________________________