BioMed Planning Worksheet: B.S., Biological Sciences, Biomedical Science Specialization
Revised 2014 (120 hours)

Student Name: ___________________________________________________________

Email: __________________________ Matriculation Date: _______________________

Faculty Mentor: __________________________ Home Dept. _______________________

**University Core Curriculum** (see Undergraduate Catalog for list of course options)

**Foundation Skills**
- Composition (6 hours)
  - UCOL 101 Foundations of Inquiry

- University College (3 hours)
  - UCOL 101 Foundations of Inquiry

- Speech Communication (3 hours)
  - SPCM 101 (3 hours)

- Mathematics (3 hours)
  - MATH 108 and 109, or 111 or 141 or 151

**Disciplinary Studies**
- Fine Arts (3 hours)
  - CHEM 200 and 201

- Science (6 hours)
  - Group I
    - CHEM 200 and 201
  - Group II
    - BIOL 200A

- Human Health (2 hours)

- Humanities (6 hours)

- Social Science (6 hours)

**Integrative Studies**
- Multicultural (3 hours)

- __________________________

**College of Science Requirements**
- 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
  - ENGL 290 Intermediate Analytical Writing or ENGL 291 Intermediate Technical Writing or
  - Two-semester sequence of a foreign language
Requirements for the Biological Sciences Major (Biomedical Science Track): 64-67 hours

**Biology Core:** 25-26 hours
- BIOL 200A Cell and Molecular Biology, Genetics and Evolution [1 (+ 3)]
- BIOL 200B Organismal and Ecological Biology [4]
- BIOL 305 Principles of Genetics or MICR 302 Molecular Biology [3]
- BIOL 306 Cell Biology or BIOL 409 Developmental Biology or ZOOL 300 Vertebrate Embryology [3-4]
- MICR 301 Principles of Microbiology [4]
- PHSL 301 Survey of Human Anatomy [4]
- PHSL 310 Principles of Physiology [5]
- 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 340 Organic Chemistry I [3]
  - CHEM 442 Organic Chemistry II and CHEM 443 Organic Chemistry Laboratory II, or
    CHEM 350 Introduction to Biological Chemistry and CHEM 351 Biochemistry Laboratory
- 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
- EPSY 402 Basic Statistics or MATH 282 Intro. to Statistics or PLB 360 Intro. Biostatistics

**Life Science Electives:** choose 12 hours from the following
- MICR 403 Medical Microbiology Lecture [3]
- MICR 421 Biotechnology [3]
- MICR 441 Viruses and Disease [3]
- MICR 453 Immunology Lecture [3]
- MICR 460 Bacterial and Viral Genetics [3]
- MICR 477 Microbial Ecology [3]
- MICR 480 Molec. Biol. Microorganism Lab [3]
- MICR 481 Diagnostic & Applied Micro Lab [3]
- PHSL 401A, B Advanced Human Anatomy [5, 5]
- PHSL 410A, B Mammalian Physiology [4, 4]
- PHSL 430 Cellular and Molecular Physiology [3]
- PHSL 433 Comparative 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 Comparative Vertebrate Anatomy [5]
- ZOOL 426 Comparative Endocrinology [3]

**Free Electives** (6-9 hours)

- ____________________________________________
- ____________________________________________
- ____________________________________________