**Visual Reference: MOCK 4 Year Semester Layout for the BSC (BS) Degree**

**BACHELOR OF SCIENCE in Cellular and Molecular Biology**

**Pre-Medical Proposed Course Sequence**

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| **Freshman Year, Fall**  UNIV LU course                                                           1 hour  ENGL 15000 Composition 1                                        3 hours  CHM 23000 General Chemistry 1                                3 hours  MTH 15100 College Algebra                                        3 hours  BSC 24000 Intro Biological Diversity                           4 hours  Total                                                                           14 hours | **Freshman Year, Spring**  ENGL 17000 Composition 2                                     3 hours  CHM 23100 General Chemistry 2                             3 hours  CHM 24100 General Chemistry 2 Lab                      1 hour  MTH 17300 Survey Calculus                                    4 hours  BSC  24400 Intro Cell and Molec                              4 hours  Total                                                                        15 hours |
| **Sophomore Year, Fall**  CHM 23200 General Chemistry 3                               3 hours  CHM 24200 General Chemistry 3 Lab                        1 hour  PHY 25100 Intro Physics 1                                         4 hours  BSC 24800 Intro Ecology Evolution                            4 hours  MTH 24100 Natural Sciences Stats                            3 hours  Total                                                                          15 hours | **Sophomore Year, Spring**  PHY 25200 Intro Physics 2                                     4 hours  BSC 28500 Methods and Writing                            1 hour  CHM 36100 Organic Chemistry 1                           4 hours  GE Social Science                                                   3 hours  GE ENGL Lit                                                            3 hours  Total                                                                       15 hours |
| **Junior Year, Fall**  CHM 36200 Organic Chemistry 2                             4 hours  30000+ Level BSC Major Elective Course                  4 hours  GE Human Cultures                                                    3 hours  30000+ Level Elective                                                 3 hours  Total                                                                          14 hours | **Junior Year, Spring**  BSC 40400 Cell Biology                                           4 hours  CHM 42200 Biochemistry: Metabolism 4 hours  30000+ Elective                                       3 hours  BSC 35300 Microbiology                4 hours  Total                                                                        15 hours |
| **Senior Year, Fall**  BSC 40800 Genetics                                                   4 hours  BSC 46400 Evolution 3 hours  CHM 42100 Biochemistry: Structure 4 hours  CHM 35500 Analytical Chemistry 4 hours  Total                                                                          15 hours | **Senior Year, Spring**  BSC 48800 Genetics of Evolution                           2 hours  GE ART                                                                   3 hours  GE US HIST or Govt                                               3 hours  30000+ Level Elective                                             3 hours  30000+ Level Elective                                             3 hours  Total                                                                       14 hours  Grand Total 120 hours |

**The MCAT**

* The MCAT is offered in January and from March through September. Ideally, you should complete all premedical coursework before taking the exam.
* Taking the exam by spring allows for earlier application submission, while September is the latest accepted by many schools for the following fall entering class.
* The MCAT consists of four multiple-choice sections:
  + Biological and Biochemical Foundations of Living Systems
  + Chemical and Physical Foundations of Living Systems
  + Psychological, Social, and Biological Foundations of Behavior
  + Critical Analysis and Reasoning Skills  
    For the latest information, visit [AAMC MCAT](https://www.aamc.org/students/applying/mcat/mcat2015).

Pre-Medical Information Summary

# Academic Preparation

Preparing for medical school involves earning a bachelor’s degree and completing required prerequisite courses, typically in the sciences, which vary by institution. A list of common courses can be found at the end of this summary. There is no preferred major, so it’s recommended to pursue a field you’re passionate about. Competitive applicants maintain high grades, so it’s important to pace yourself for success. Keep in mind that all grades, including repeated courses, will be considered during the application process.

# Shadowing & Clinical Experience

Gaining medical experience is crucial and should be one of your first steps. Observing multiple doctors in their clinical practices will provide valuable insights into the profession and expose you to different medical specialties. Competitive applicants typically complete 100-200 hours of combined shadowing and clinical experience.

# Service to the Community

As medical school prepares you for a humanitarian profession, consistent volunteer work that reflects a commitment to serving others is essential. This should be an ongoing activity throughout your college years, not something done temporarily.

# Leadership Experience

In your role as a medical professional, you’ll be a leader and team member with patients, staff, colleagues, and within your community. Leadership experience can include holding office in organizations, participating in committee work, leading church activities, managing or supervising projects, training others, and roles like teaching assistant, tutor, coach, peer counselor, or mentor.

# Research Experience

Many Medical schools increasingly recommend that students have research experience, as staying current in the field requires doctors to engage with research literature throughout their careers. The research does not need to be medically related or conducted in a lab. It can be in any discipline, as long as it involves working with a professor or researcher on hypothesis-driven research that applies to the scientific method.

# Things to Remember

1. What you do outside of class is important so don’t neglect activities. However, remember that activities complement your coursework, but they will not compensate for low grades
2. Keep contact information for supervisors and doctors you shadow or work within case you need recommendation letters. Even if you discontinue an activity, try to maintain a relationship with your supervisor.
3. Record all hours of service and experiences. Writing reflections on what you learned in a journal will help when you write your personal statement for your application.