Registering for Anatomy and Physiology (BIO 116 or BIO 203)  
(The Details)

Prior to registering for BIO 116 Human Anatomy for Allied Health OR BIO 203 Anatomy and Physiology I, all students are required to document that they have completed the proper pre-requisite course work. Students must:

1. Earn a “C” or better in BIO 119 OR CHM 101*  
   OR  
   Earn a Score of 75% or higher on the Biology Proficiency Test (see below)  
   AND

2. Pass MAT 099 or place into MAT 100  
3. Pass ENG 099 or place into ENG 100  

* Please note a grade of C or better in either BIO 113 Principles of Biology I or CHM 103 General Chemistry I is also an acceptable pre-requisite course

Biology Proficiency Exam

Students may elect to take the Biology Proficiency Exam to test their knowledge on the relevant prerequisite content needed to be successful in a college-level anatomy and physiology course (Bio 116 or Bio 203). This exam provides an opportunity for students with a good understanding of the core concepts in chemistry and biology to demonstrate their knowledge of these concepts. A student who earns a passing score on this exam will be allowed to directly enroll in anatomy and physiology --without first earning a “C” or better in Bio 119 or CHM 101. (Note: If you have not had a biology or chemistry course recently you will find it the most beneficial to enroll in BIO 119 or CHM 101.)

Passing score: In order to directly enroll in BIO 116 or BIO 203 and to be exempt from the BIO 119 or CHM 101 prerequisite, a student will need to score the following on the placement exam:

- BIO 116: 70% or higher  
- BIO 203: 75% or higher  

There are 100 multiple choice questions on this exam covering the following basic concepts in biology and chemistry:

- Graphs/Basic Math (metric conversions/dimensional analysis)  
- General Chemical Principles  
- Water, Acids, Bases and pH  
- Organization within the human body  
- Homeostasis  
- Cell structure and function  
- Structure and function of macromolecules  
- Cell transport and membrane functions  
- Energy, Enzyme & Metabolism  
- Cellular respiration  
- DNA/RNA structure and function  
- Protein synthesis (Transcription & translation)  
- Mitosis

Please contact the LSC at 240-500-2251 and ask for the Science LSC Staff member if you have any questions or need additional information regarding the exam.
Preparing for the Biology Proficiency Exam

There are several ways to prepare for this exam:

1. Review your notes from your previous high school or college biology and chemistry course.

2. Review the Modules, PowerPoints, textbooks that are available at the Learning Support Center (LSC). Examples of specific resources include “The Chemistry of Life” computer module and (2) the “Chemistry for Biology Students” text. Both have practice questions and cover much of the content on the exam.

3. Complete BIO 109 (Modular Biology) in the Science Learning Center. This is a self-paced series of learning modules covering the topics required for the placement exam. This is a one-credit course with flexible scheduling and requires good reading skills, high motivation, persistence and independent learning. Please note – this may or may not be covered by Financial Aid – please check with Financial Aid before registering for BIO 109.

4. Review material online. There are several good websites with videos/animations available. These include but are not limited to the following:
   
   **Khan Academy Biology:**
   
   [https://www.khanacademy.org/science/biology](https://www.khanacademy.org/science/biology)
   
   **CrashCourse Biology (a YouTube Channel):**
   
   [https://www.youtube.com/playlist?list=PL3EED4C1D684D3ADF](https://www.youtube.com/playlist?list=PL3EED4C1D684D3ADF)
   
   **SparkNotes:**
   
   
   **Bio-Alive (Links to various different sites):**
   

5. There are also 3 practice exams and an outline available online:  
   

Please remember, each student will have only ONE attempt at the placement exam. Failure to earn the required minimum passing grade will require a student to take either BIO 119 or CHM 101 and earn a grade of “C” or better before being permitted to register for BIO 116 or BIO 203.

Students are encouraged to stop in the Learning Support Center (LSC), which is located between the STEM building, and the Student Center next to Kepler Theater. Students may also call 240-500-2251 and ask for the LSC Science Staff member for questions about the Biology Proficiency Exam for Anatomy and Physiology. If you are struggling on a particular topic the LSC staff can help remediate you on that topic.