Prior to registration for BIO 103, Anatomy and Physiology I, all students will be required to document that they have passed a high school or college level chemistry course. Students must also pass MAT 099 or place into MAT 100 or higher, pass ENG 100 or place into ENG 101, AND earn a minimum score of 65% on the A&P Placement Exam. The A&P Placement Exam is administered in the Academic Testing Center. Please contact the LSC at 240-500-2251 and ask for Clayton or Chris for any questions or additional information regarding the exam.

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

- cell structure and function
- Structure and function of macromolecules
- membrane transport and function
- organization within the human body
- general chemical principles
- graphs/Basic Math (algebra)
- water, acids, bases, and pH
- homeostasis
- energy, enzymes and metabolism
- Cell respiration
- Mitosis
- DNA structure and function

There are several ways to prepare for this exam:

1. If you have the prerequisite math, English and chemistry skills, review your high school biology and chemistry notes and/or review the study materials available online. This should refresh the important concepts needed to pass the Placement Exam. If this is not enough then there are some more structured options available (see 2-4).

2. Successfully complete a college level Chemistry (CHM 101 is recommended) and/or Biology (BIO 106 or 101) course before attempting the exam. **Even if you take one or both of these courses you are still required to take (and pass) the A&P placement exam.** However, this is 4-8 credits of college level science and may be more than you need for this placement exam. If so, consider option 3.

3. Successfully complete BIO 099 (Biology for Allied Health). This course does not count toward graduation. However, it was designed to prepare you specifically for A & P placement test and the final exam for BIO 099 is the placement exam. **In order to pass BIO 099 the student must pass the A & P Placement Test and complete the requirements as written on the instructor’s syllabus.**

4. Successfully 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.

   - If a student attempts the A&P Exam once and is unsuccessful, they must complete items 1, 2, 3, or 4 before attempting the exam again.

   - If a student attempts the A&P exam twice and is still unsuccessful, they must complete 2, 3, or 4 before attempting the exam again. This will delay taking A &P for an entire semester because it cannot be taken concurrently with the courses listed in 2, 3, and 4.