BIOL 2010 Anatomy and Physiology I

Instructor:
E-Mail
Phone:
Office:
Office Hours:

I. **Course Description**
An intensive course for students interested in entering health-related fields that will count as a biology elective. Topics include: the skeletal, articular, muscular, nervous, and integumentary systems; cellular chemistry and structure; and histology.

*The laboratory component of the course is integrated into the lectures (i.e., there is no separate lab time).*

**Credit:** 4 credits (3 class hours, 3 lab hours)
**Prerequisites:** Level 2 placement in English, Math and Reading.

II. **Course Outcomes and Topics**
- Describe atomic structure, the types of chemical bonding and the structure, synthesis and function of carbohydrates, lipids, proteins and nucleic acids.
- Describe cellular structure and function with respect to the cell membrane, cellular organelles and the cell nucleus.
- Differentiate between the concepts of diffusion and carrier-mediated transport and explain the structure, function and movement of water.
- Describe the structure and function of the tissue types and the characteristics, distribution and products of the specialized cells of tissue.
- Identify by name and demonstrate the location of anatomical components of the skeletal system, the muscular system, the nervous system, the integumentary system and the organs of the special senses.
- Appraise how structure denotes function and function denotes structure at the gross and cellular levels in the organ systems covered in the course.
- Formulate a hypothesis concerning normal and altered physiology. Conduct an experiment that tests the hypothesis. Analyze and explain the results.

**Course Topics**
- Study Skills
- Levels of Organization
- Chemical Level of Organization
- The Cellular Level of Organization
- Tissue Level of Organization
- The Integumentary System
- Osseous Tissue and Skeletal Structure
- The Axial Skeleton
- The Appendicular Skeleton
- Articulations
- Muscle Tissue
- The Muscular System
- Neural Tissue
- The Brain
- Nervous System
- The Special Senses
Lab Topics
- Chemistry
- Microscope
- Cytology
- Histology
- Skeletal system
- Muscles
- CNS, PNS, and ANS
- Special senses

III. Required Materials
Summer 2017
- Students who purchase a used copy of the textbook must also purchase an access code for Mastering A and P for *Fundamentals of Human Anatomy and Physiology, 10th edition*. Publisher: Pearson Benjamin Cummings (ISBN: 0321962710 )

Fall 2017
- Students who purchase a used copy of the textbook must also purchase an access code for Mastering A and P for *Fundamentals of Human Anatomy and Physiology, 11th edition*; Pearson Benjamin Cummings (ISBN: 9780134478692 )

Optional materials

IV. Course Policies
Attendance Policy
Each Instructor will provide information regarding his/her attendance policy. Failure to attend class will result in a final course grade of “FA” or “FN” (see explanation below), depending on the individual instructor’s course policy.

FA=failure, attendance-related (unofficial withdrawal) Last recorded date of attendance required
FN= failure, never attended class (unofficial withdrawal)

Assessment and Grading: ***Subject to change at instructor’s discretion***
Study Skills Modules: Each student will complete 3-5 modules on Study Skills. Modules will be offered online. Each module will consist of a lecture followed by a quiz. Students who fail to complete the required modules will be required to meet with the instructor.
Lecture Tests
- Lecture tests will be multiple choice, short answer, matching, fill-in-the-blank, true-false or picture/diagram labeling.
- Lecture tests will account for 55% of the total course grade.
- No make-up lecture tests will be allowed unless there are emergency circumstances.

Assignments/Essays/Presentation/Labs
- Assignments covering a variety of topics will be given during the course of the semester.
- The format of the material will be at the discretion of the instructor.
- Assignments will account for 15% of the total course grade.
- Late assignments will not be accepted.
- Make-ups will not be allowed.

Laboratory Practical Exams
- Laboratory practical exams will be given.
- Lab practical exams will be identification on lab models, photographs, drawings, microscopic slides, or preserved animal specimens.
- Laboratory practical exams will account for 20% of the total course grade.
- Laboratory practical make-up examinations will NOT be given.

Final calculation of the course grade will be based on the following percentages:
- 55% - Lecture tests
- 15% - Assignments/Essays/Presentations/Labs
- 20% - Laboratory Practical Exams
- 10% - Cumulative midterm or final exam

GRADING SCALE
- A = 89.5 - 100.00
- B = 79.5 - 89.49
- C = 69.5 - 79.49
- D = 59.5 - 69.49
- F = Less than 59.5

Extra credit may be offered throughout the semester at the instructor’s discretion. The final exam cannot be made up. Lab activities and exams cannot be made up and an absence will result in a 0 for that day’s lab activity.

Safety issues
The instructor will go over new regulations regarding safety in lab classes. Each student must turn in a signed copy of the regulations, and will be given a copy to keep.

Student Communication Channels
It is the student’s responsibility to check NS Online (D2L) and MyNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. NS Online contains specific course information and MyNSCC contains information important for other purposes.
V. ADA Statement
Nashville State complies with the Americans with Disabilities Act. If you wish to request any special accommodations for any courses in which you are enrolled, contact the Students Disabilities Office. Such Services must have proof of documentation that is not over 3 years old. Contact the Disabilities Coordinator at 353-3721.

VI. Classroom Behavior
Nashville State Community College has a zero tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary sanctions.

The instructor has primary responsibility for control over classroom behavior and maintenance of academic integrity. He/she can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or in conduct which violates the general rules and regulations of the College. Disruptive behavior in the classroom may be defined as, but is not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.).

Please be aware that children are not allowed in class or unattended on campus.

Academic Dishonesty (Honor Code)
Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. “Plagiarism may result from: (1) failing to cite quotations and borrowed ideas, (2) failing to enclose borrowed language in quotation marks, and (3) failing to put summaries and paraphrases in your own words” (A Writer’s Reference 331). Academic dishonesty may be defined as, but is not limited to, intentionally trying to deceive by claiming credit for the work of another person, using information from a web page or source without citing the reference, fraudulently using someone else’s work on an exam, paper, or assignment, recycling your own work from another course, purchasing papers or materials from another source and presenting them as your own, attempting to obtain exams/materials/assignments in advance of the date of administration by the instructor, impersonating someone else in a testing situation, providing confidential test information to someone else, submitting the same assignment in two different classes without requesting both instructor’s permission, allowing someone else to copy or use your work, using someone else’s work to complete your own, altering documents, transcripts or grades, and forging a faculty/staff member’s signature.

In addition to other possible disciplinary sanctions that may be imposed through regular college procedures as a result of academic dishonesty the instructor has the authority to assign an “F” or a “Zero” for the exercise, paper, or examination
or to assign an “F” for the course.

**NOTE:** This syllabus is meant simply as a guide and overview of the course and dates of assessments, etc. are subject to change at the instructor’s discretion.