

# SUNY COLLEGE AT OLD WESTBURY

## BIOLOGICAL SCIENCES PROGRAM

Instructor: Dr. Eric L. Schwartz Telephone Number - 628-5613 Office: NSB S- 218  
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Course Info can be found at [www.schwartzinfo.com](http://www.schwartzinfo.com)  
Class Meets Tues/Thurs from 1:00PM to 4:30PM in NSB – S- 102

### **BS – 2311, Human Anatomy & Physiology II**

#### **Laboratory Component - 1 Credit**

#### **Summer 2018**

Human Anatomy and Physiology I and II comprise a two-semester series of courses studying human anatomy and physiology. The concept of the relationships between Form and Function is stressed throughout the course and is used to explain concepts at the gross and microscopic levels. In addition, the study of homeostatic mechanisms is used to describe the control of the various systems, as well as the concept of the failure of homeostasis leading to disease states.

Human Anatomy and Physiology II consists of a lecture component, BS-2310 (3 credits) and a laboratory component, BS-2311 (1 credit). Human Anatomy and Physiology I also consists of a lecture component, BS-2300 (3 credits) and a laboratory component, BS-2301 (1 credit). Students registering for BS-2300 must also register for BS-2301 during the same semester. Students registering for BS-2310 must also register for BS-2311 during the same semester. BS-2300 and BS-2301 are prerequisites for BS-2310 and BS-2311.

Please note that these courses are required for entry into many programs in Physical Therapy, Nursing, Physician's Assistant, Dental Technician, and other Allied Health Professional Programs and as such they will be taught at a level commensurate with ensuring proficiency.

**Required text:** Anatomy & Physiology: The Unity of Form and Function by Saladin, Most Current Edition,

Laboratory Manual for Human A&P: Fetal Pig Version w/PhILS 4.0 Access Card by Martin, most current edition.

The most cost effective method to get these materials is the package the Bookstore is stocking which has Saladin's 2-semester access of Connect including full E-Book packaged within the Martin Lab Manual with PhILS access. McGraw Hill Higher Education ISBN # 9781307166316.

There are required online PhILS assignments that you will need to complete for lab. In addition there are assignments and quizzes as part of the Lecture component so you will need the Phils access and the Connect access codes. There is a full E-Book version of the textbook included as part of the connect access. Once you have access to the Connect materials, at your own option you can purchase a full color printed loose leaf version of the text book and have it sent to you for a nominal fee.

It is expected that you will have familiarized yourself with the lecture or lab topics before each scheduled lecture or lab. There will be in-class quizzes in Lecture and in Lab so preparation is paramount to being successful in the course.

**Remember.** There will be no extra credit assignments that you can complete towards the end of the course to raise grades that are lower than you hoped for. It is highly recommended that you stay on track with the material and study regularly so that you can **earn** the grade that you want or need.

**Grading:** The average of a Midterm and a Final Practical Examination along with weekly quizzes, and other lab assignments will determine the grade for this course, the laboratory component of Human Anatomy and Physiology 2. **No extra credit assignments will be given.**

**Attendance:** Attendance in lab is mandatory. Missed labs may result in either a reduced grade or failure. Each 2 latenesses will be equal to 1 absence. More than 2 lab absences will result in failure.

**Make-up exams:** If a student misses an exam that student will be given a zero for that exam. No make-up exams for missed laboratory practical exams will be given.

It is the student's responsibility to be aware of lecture and/or lab schedule changes, exam dates and any other announcements that may be made regarding the course.

Please be certain that all electronic devices are in silent mode and do not cause any distractions. Activities such as text messaging during class or any device related activities other than following online course materials is strictly prohibited. Students participating in such activities will be asked to leave the classroom to avoid any further distractions.

Use of electronic devices are also prohibited during all examinations and quizzes. Any student who is found to be violating this policy will receive a zero for that exam. Repeated violations may result in removal from the class.

## **BS-2310/2311 Learning Objectives and Laboratory Schedule**

### **A. Endocrine System**

Upon successful completion of this section of the course students shall be able to identify major gross and microscopic components of the various parts of the Endocrine system as well as explaining the physiologic basis of hormone action and regulation. The student shall also be able to explain the structure and functions of various parts of the Endocrine system and diseases affecting the system.

### **B. Digestive System**

Upon successful completion of this section of the course students shall be able to identify major gross and microscopic components of the various parts of the Digestive system as well as explaining the physiologic basis of digestion and absorption and the actions of various digestive

enzymes in different environments. The student shall also be able to explain the structure and functions of various parts of the Digestive system and diseases affecting the system.

### **C. Respiratory System**

Upon successful completion of this section of the course students shall be able to identify major gross and microscopic components of the various parts of the Respiratory system as well as explaining the physiologic basis of diffusion of gasses and mechanics of breathing in different environments. The students shall be able to perform and interpret basic Spirometry and shall also be able to explain the structure and functions of various parts of the Respiratory system and diseases affecting the system.

### **D. Cardiovascular System**

Upon successful completion of this section of the course students shall be able to identify major gross and microscopic components of the various parts of the Cardiovascular system as well as performing and explaining the basis of various blood tests, blood typing, pulse exams, auscultation of the heart sounds, taking blood pressure, and EKG's. The students shall be able to perform and interpret basic cardiovascular exams to demonstrate cardiac output and exercise related changes of the cardiovascular and respiratory systems and shall also be able to explain the structure and functions of various parts of the Cardiovascular system and diseases affecting the system.

### **E. Urinary System**

Upon successful completion of this section of the course students shall be able to identify major gross and microscopic components of the various parts of the Urinary system as well as performing and explaining the basis of various tests such as urinalysis and response of the urinary system to various conditions. The students shall be able to explain the structure and functions of various parts of the Urinary system and diseases affecting the system.

### **F. Reproductive System**

Upon successful completion of this section of the course students shall be able to identify major gross and microscopic components of the various parts of the male and female reproductive systems. The student shall be able to explain the structure and functions of various parts of the male and female Reproductive system and diseases affecting the system.

### **G. Inheritance and Development**

Upon successful completion of this unit students shall be able to demonstrate an understanding of predicting outcomes of crosses based on the Basic Concepts of Mendelian Genetics, including simple dominant and recessive inheritance, as well as incomplete dominance, codominance and sex linked inheritance via punnet squares and analyze karyotypes. In addition the student shall be able to identify and describe various stages of human development.

## BS-2311 Laboratory Schedule – Summer 2018

<b>Lab #</b>	<b>Date</b>	<b>Lab Manual Chapter / Topic</b>
<b>Lab 1</b>	<b>7/10/2018</b>	<b>39 Endocrine Structure and Function 40 Diabetic Physiology</b>
<b>Lab 2</b>	<b>7/12/2018</b>	<b>54 Digestive Organs 65 Fetal Pig Dissection: Digestive System 55 Actions of a Digestive Enzyme</b>
<b>Lab 3</b>	<b>7/17/2018</b>	<b>50 Respiratory Organs 64 Fetal Pig Dissection: Respiratory System 51 Breathing and Respiratory Volumes 52 Spirometry 53 Control of Breathing Review</b>
<b>Lab 4</b>	<b>7/19/2018</b>	<b>Midterm Examination</b>
<b>Lab 5</b>	<b>7/24/2018</b>	<b>41 Blood Cells 42 Blood Testing 43 Blood Typing 44 Heart Structure 63 Fetal Pig Dissection: Cardiovascular System</b>
<b>Lab 6</b>	<b>7/26/2018</b>	<b>45 Cardiac Cycle 46 Electrocardiography 47 Blood Vessel Structure, Arteries and Veins 48 Pulse Rate and Blood Pressure</b>
<b>Lab 7</b>	<b>7/31/2018</b>	<b>56 Urinary Organs 57 Urinalysis 66 Fetal Pig Dissection: Urinary System</b>
<b>Lab 8</b>	<b>8/2/2018</b>	<b>58 Male Reproductive System 59 Female Reproductive System 60 Fertilization and early development 61 Genetics 67 Fetal Pig Dissection: Reproductive Systems Review</b>
<b>Lab 9</b>	<b>8/7/2018</b>	<b>Final Examination</b>

## **SUNY COLLEGE AT OLD WESTBURY**

### **POLICY ON ACADEMIC INTEGRITY**

#### **Administered by the Office of Academic Affairs**

As is the policy of all SUNY institutions, students are expected to maintain the highest standards of honesty in their college work. Any act which attempts to misrepresent to an instructor or College official the academic work of the student or another student, or an act that is intended to alter any record of a student's academic performance by unauthorized means, constitutes academic dishonesty. Cheating, forgery and plagiarism are considered serious offenses and are subject to disciplinary action.

#### **Cheating**

Cheating is defined as giving or obtaining information by improper means in meeting any academic requirements. Examples of cheating, although not inclusive, include: unauthorized giving or receiving of information for an examination, paper, laboratory procedure, or computer assignment (file or printout); taking an examination for another student or allowing another student to take an examination for you; altering or attempting to alter a grade either on graded work or in an instructor's records or on any College form or record.

#### **Forgery**

Forgery is defined as the alteration of college forms, documents, records, or the signing of such forms or documents by someone other than the proper authority.

#### **Plagiarism**

Plagiarism is defined as the use of material from another author whether intentional or unintentional, without referencing or identifying the source of the material. If students have any questions as to what constitutes plagiarism, it is their responsibility to get clarification by consulting with the appropriate instructor.

### **ACCOMMODATIONS FOR STUDENTS WITH SPECIAL NEEDS:**

If you have or suspect you may have a physical, psychological, medical or learning disability that may impact your course work, please contact Stacey DeFelice, Director, The Office of Services for Students with Disabilities (OSSD), NAB, 2065, Phone: 516-628-5666, Fax (516) 876-3005, TTD: (516) 876-3083. E-mail: defelices@oldwestbury.edu. The office will help you determine if you qualify for accommodations and assist you with the process of accessing them. All support services are free and all contacts with the OSSD are strictly confidential. SUNY/Old Westbury is committed to assuring that all students have equal access to all learning activities and to social activities on campus.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions.

2. It is essential to ensure that all entries are supported by appropriate evidence and are clearly dated and described.

3. The second part of the document outlines the various methods used to collect and analyze data from different sources.

4. These methods include direct observation, interviews, and the use of specialized equipment and software.

5. The final part of the document provides a summary of the findings and conclusions drawn from the research.

6. The results of the study indicate that there is a significant correlation between the variables being studied.

7. These findings have important implications for the field of research and may lead to further studies.

8. In conclusion, the research has provided valuable insights into the complex relationship between the variables.