

**Biology 2652 Human Anatomy/Physiology II (CRN 80563)**  
**Biology Department, College of Arts and Sciences, Valdosta State University**  
**Section D (4 credit hours)**

**Fall Semester, 2012**

**Instructor** - Dr. J. Mitchell Lockhart

**Office** – Biology/Chemistry Building, Room 2029

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**Office Hours:** As posted or by appointment

**Course hours:** Lecture – Tuesday, Thursday – 2:00-3:15 PM, Biology Building Room 1202

Lab – Monday, 12:00-1:50 PM, Biology Building Room 1203

**Textbook** - G.J. Tortora and S.R. Grabowski, *Principles of Anatomy and Physiology*, Thirteenth Ed.

**(Required)**

**Laboratory Textbook** - M.E. Smith, and W.J. Loughry, *Laboratory Manual for Human Anatomy and Physiology*. **(Required)**. Note, most of the lab exercises are available online.

**Course Description:** This course is the second in a two part series. In BIOL 2652 we will continue with human anatomy and general physiological principles with emphasis on the following: endocrine (if not previously covered), cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems, plus development. In each system, we will cover the basic structure and function of the components of that system.

**Pre-Requirement:** BIOL 2651 with a grade of C or better or permission of instructor.

**Attendance: MANDATORY!** I do keep track of who is and isn't attending lecture and laboratory. This course has a considerable amount of new concepts and terminology and it serves your best interest to attend class regularly. Any student disrupting the classroom and affecting the learning experience of others will be asked to leave. Along these lines, **NO** cell-phones, beepers, and/or associated earpieces are allowed either in the **lecture room or laboratory**. My policy is not to give a warning, rather, if a cell-phone or beeper activates during lecture/laboratory, you will lose one **LETTER GRADE** from your final grade. Viewing a cell-phone or pager that activates on "silent" mode during a quiz or exam will be treated as an instance of **CHEATING** and handled accordingly (in addition to the above penalty). Those wishing to utilize laptop computers as part of the class are required to sit in the first row of the classroom. Viewing anything other than BIOL 2652 coursework on a computer during course time will result in the loss of one **LETTER GRADE** from your final grade. University guidelines dictate that students missing 20% of lecture sessions for this class are subject to receiving a grade of "F" regardless of their standing in the course per the discretion of the instructor.

**Students With Documented Disabilities:** Students requiring accommodations or modifications because of documented disabilities should discuss this need with Dr. Lockhart at the beginning of the quarter. Students not registered with Special Services Program must contact the Access Office for Students with Disabilities in Farber Hall. Their phone number is 245-2498.

**Assessment:** For the lecture grade, four exams (tentative) plus a comprehensive final will be given. Each exam will be worth 100 points. Questions will be based on both material covered in lecture and reading material assigned in class. Exam questions will be in a variety of formats including (but not limited to) essay, short answer, multiple choice, fill in the blank, drawings, etc...Any questions concerning grading should be brought to the attention of the instructor **NO LATER** than one week following return of the exam. **NO make-up exams will be given for any reason.** Should you miss an exam, you may take the comprehensive final to replace the missed exam grade.

For the laboratory grade, 3 lab practicals (tentative) will be given. The **Lab practicals cannot be made up. If a lab practical is missed, you will receive a zero for that lab grade.** As part of the lab, various graded assignments will be given (approximately 50-100 points worth). Your final grade will be a combination of your lecture exam scores and laboratory score. Lecture exams will comprise 65% and lab exams and assignments will comprise 35% of your final score.

The lecture final will be comprehensive and **OPTIONAL**. For those wishing to better their grade, this exam score will replace the lowest written exam score received during the semester.

**Grade Scale:** 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, < 60 = F

**Privacy Act:** Because of the Buckley Amendment or Privacy Act, grades will not be discussed over the phone, given to friends, or given to relatives. Final grades will be posted, only at your request, under an anonymous 6 digit number which you choose later in the semester.

**Cheating:** Refer to the Student Code of Ethics in the Valdosta State University Student Handbook. A student caught cheating will be penalized ranging from receiving a zero for that assignment or test to failing the class.

**Important Dates:** Mid-Term – October 4, Final Exam – Wednesday, December 5, 2:45 – 4:45 PM

**\* The Instructor reserves the right to modify the above contents with proper notification.**

## **Outcomes:**

### **Course:**

By the end of BIOL 2652, students who successfully complete the course should have:

1. Gained factual knowledge, to include anatomy and physiological terminology, methods, and principles, about Anatomy and Physiology II. (DO – 2,3,5; VSUGEO – 5)
2. Learned fundamental principles, generalizations, or theories of Human Anatomy and Physiology II. (DO – 2,3,5; VSUGEO – 5)
3. Learned to apply course material (to improve thinking, problem-solving, and decisions) in Human Anatomy and Physiology II. (DO – 2,3,5; VSUGEO – 5)
4. Developed specific skills, competencies and points of view needed by professional in the fields most closely related to Anatomy and Physiology II. (DO – 2,3,5; VSUGEO – 5)
5. Acquired an interest in learning more by asking questions and seeking answers about Anatomy and Physiology II. (DO – 2,3,5; VSUGEO – 5)

### **Department:**

1. Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral formats used in peer-reviewed journals and at scientific meetings.
2. Describe the evolutionary processes responsible for biological diversity, explain the phylogenetic relationships among the major taxa of life, and provide illustrative examples.
3. Demonstrate an understanding of the cellular basis of life.
4. Relate the structure and the function of DNA/RNA to the development of form and function of the organism and to heredity.
5. Interpret ecological data pertaining to the behavior of the individual organism in its natural environment; to the structure and function of populations, communities, and ecosystems; and to human impacts on these systems and the environment.

### **Valdosta State University General Education Outcomes:**

1. Students will demonstrate understanding of the society of the United States and its ideals. They will possess the requisite knowledge of the society of the United States, its ideals, and its functions to enable them to become informed and responsible citizens. They will understand the connections between the individual and society and the roles of social institutions. They will understand the structure and operational principles of the United States government and economic system. They will understand United States history and both the historical and present role of the United States in the world.

2. Students will demonstrate cross-cultural perspectives and knowledge of other societies. They will possess sufficient knowledge of various aspects of another culture, including the language, social and religious customs, aesthetic expression, geography, and intellectual and political history, to enable them to interact with individuals within that society from an informed perspective. They will possess an international viewpoint that will allow them to examine critically the culture of their own nation and to participate in global society.
3. Students will use computer and information technology when appropriate. They will demonstrate knowledge of computer concepts and terminology. They will possess basic working knowledge of a computer operating system. They will be able to use at least two software tools, such as word processors, spreadsheets, database management systems, or statistical packages. They will be able to find information using computer searching tools.
4. Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write coherently in standard English; to speak well; to read, to understand, and to interpret the content of written materials in various disciplines; and to listen effectively and to understand different modes of communication.
5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices. They will understand the basic concepts and principles underlying scientific methodology and be able to collect, analyze, and interpret data. They will learn a body of scientific knowledge and be able to judge the merits of arguments about scientific issues. They will be able to perform basic algebraic manipulations and to use fundamental algebraic concepts to solve word problems and equations. They will be able to use basic knowledge of statistics to interpret and to analyze data. They will be able to evaluate arguments based on quantitative data.
6. Students will demonstrate knowledge of diverse cultural heritages in the arts, the humanities, and the social sciences. They will develop understanding of the relationships among the visual and performing arts, literature and languages, and history and the social sciences. Students will be versed in approaches appropriate to the study of those disciplines; they will identify and respond to a variety of aesthetic experiences and engage in critical thinking about diverse issues. They will be able to identify the components of and respond to aesthetic experiences in the visual and performing arts. They will develop knowledge of world literature within its historical and cultural frameworks. They will understand modern issues within a historical context and the role of the individual in various forms of societies and governments.
7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written, and visual materials. They will be skilled in inquiry, logical reasoning, and critical analysis. They will be able to acquire and evaluate relevant information, analyze arguments, synthesize facts and information, and offer logical arguments leading to creative solutions to problems.
8. Students will demonstrate knowledge of principles of ethics and their employment in the analysis and resolution of moral problems. They will recognize and understand issues in applied ethics. They will understand their own value systems in relation to other value systems. They will judge values and practices in a variety of disciplines.

**BIOL 2652 Section D**  
**Human Anatomy and Physiology II**  
**Dr. J. Mitchell Lockhart**

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**Tentative Lecture Outline - This is the order in which we will cover topics.**

<b>TOPIC</b>	<b>TEXT CHAPTERS</b>
The Endocrine System	18
The Cardiovascular System: The Blood	19
The Cardiovascular System: The Heart	20
The Cardiovascular System: Blood Vessels and Hemodynamics	21
The Lymphatic System, Nonspecific Resistance to Disease, and Immunity	22
The Respiratory System	23
The Digestive System	24
Metabolism	25
The Urinary System	26
Fluid, Electrolyte, and Acid-Base Homeostasis	27
The Reproductive Systems	28
Development and Inheritance	29

**Lecture Exams:**

- 1 – September 6
- 2 – October 4
- 3 – November 1
- 4 – November 29

**Final Exam:**

Lecture – December 5, 2:45-4:45 PM

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Tentative Lab Schedule - This is the order in which we will cover topics.

	WEEK OF	TOPIC	UNIT
1	August 13	<b>NO LAB</b>	
2	August 20	Blood Physiology	10
3	August 27	Heart Physiology	11
4	September 3	<b>Labor Day Week: NO LAB</b>	
5	September 10	Heart Anatomy	12
6	September 17	Fetal Pig Blood Vessels	13
7	September 24	Fetal Pig Blood Vessels (cont.)	13
8	October 1	Fetal Pig Blood Vessels (cont)	13
9	October 8	<b>Lab Exam I</b>	
10	October 15	<b>Fall Break, NO LAB</b>	
11	October 22	Fetal Pig Digestive System	17
12	October 29	Spirometer and Fetal Pig Respiratory System	18
13	November 5	<b>LAB EXAM II</b>	
14	November 12	Fetal Pig Urinary and Reproductive Systems	19
15	November 19	<b>Thanksgiving Week: NO LAB</b>	
16	November 26	<b>LAB EXAM III</b>	

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