

<b>Course:</b>	<b>BIO 421 GENERAL PHYSIOLOGY</b>
<b>Term, Time &amp; Location:</b>	<b>Spring, 2012. Lecture MWF 10 -10.50 am at King 308 Lab Thursday 2- 4.50 pm</b>
<b>Instructor:</b>	<b>Name: Dr. Maha Nagarajan Office: Walker 208 Email Address: mnagarajan@wilberforce.edu Phone Number: 708-5679</b>
<b>Catalog Description:</b>	Human physiology is the science of the mechanical, physical and biochemical functions of living organisms. In this class students will study human physiology to understand how all the various organ systems work and also the diseases associated with each. The principal level of focus of physiology is at the level of organs and systems. This course includes a three hour lab per week.
<b>Prerequisites</b>	Prerequisites: BIO 122, BIO 221 and CHE 232.
<b>Course Level Learning Outcomes:</b>	<p><b>Course Outcomes:</b></p> <p>Majority of the Biology Majors indicate that they want to pursue careers in Health Care Related fields. Therefore in this course students will apply what they learn in class to analyze case studies and perform laboratory assays to understand physiological processes and diseases. A student who successfully passes this course will be able to demonstrate an understanding of the following:</p> <p>The student should have knowledge of the following concepts Homeostasis, Structure and Function of Primary Tissues and Organ Systems, Structure of Carbohydrates, Proteins, Fats and Nucleic Acids and Cell Structure from previous classes. The first test will evaluate whether or not students are familiar with these concepts.</p> <ul style="list-style-type: none"> <li>○ Enzymes and Bioenergetics</li> <li>○ Cellular Respiration</li> <li>○ Different Cell Transport Mechanisms</li> <li>○ After each chapter is completed, students will be given case studies where they have to apply, analyze and diagnose. In other words they are going to diagnosing diseases and using critical thinking to arrive at a conclusion.</li> <li>○ Anatomy, Physiology and Diseases of             <ul style="list-style-type: none"> <li>○ Digestive System</li> <li>○ Regulation of Metabolism</li> <li>○ Endocrine System</li> <li>○ Excretory System</li> <li>○ Muscular System</li> <li>○ Circulatory System</li> <li>○ Immune System</li> <li>○ Nervous System</li> <li>○ Reproductive System</li> </ul> </li> </ul>

<b>Materials:</b>	<b>Textbook:</b> Human Physiology <b>Author:</b> Stuart Ira Fox
	<b>Grading Scale</b>  90 - 100% = A 89 - 90% = B 79 - 80% = C 69 - 70% = D Below 60% = F  4 tests each worth 50 points 10 case studies 100 points 10 labs 100 points 1 Final exam 200 points Total 600 points

<p><b>More details about how the grade is calculated:</b></p> <p><b>A= here are the required steps that you will need to follow:</b></p> <ol style="list-style-type: none"> <li>1. Get the book within the first two weeks of class. It is available through the WU bookstore or through Amazon, Borders, etc.).</li> <li>2. Earn at least 90% of the total points for the class. Our syllabus has more details.</li> <li>3. No more than three absences total (excused or unexcused).</li> <li>4. Spend at least 2 hours for each hour spent in class.</li> <li>5. Read the text before and after the class</li> </ol> <p><b>B= here are the required steps that you will need to follow:</b></p> <ol style="list-style-type: none"> <li>1. Get the book within the first two weeks of class.</li> <li>2. Earn at least 80% of the total points for the class.</li> <li>3. No more than three absences total (excused or unexcused).</li> <li>4. Spend at least 1 hour for each hour spent in class.</li> <li>5. Read the text before and after the class.</li> </ol> <p><b>C= here are the required steps that you will need to follow:</b></p> <ol style="list-style-type: none"> <li>1. Get the book and take good notes.</li> <li>2. Earn at least 70% of the total points for the class. Our syllabus has more details.</li> <li>3. Ask questions and seek additional help.</li> </ol> <p><b>D= here are the required steps that you will need to follow:</b></p> <ol style="list-style-type: none"> <li>1. You need a book for a D.</li> <li>2. Earn at least 60% of the total points for the class. Our syllabus has more details.</li> </ol>	<p>A student's proficiency in course work is measured in terms of the following Alphabetical symbols. Minuses and pluses are not accepted.</p> <p>A: Excellent</p> <p>B: Good</p> <p>C: Satisfactory (Grade C or better required in major courses).</p> <p>D: Poor (passing, except in major courses).</p> <p>F: Earned Failure. (Removed only by repeating the course). Upon successfully passing the course, the first grade is "excluded" from grade point average. The second grade is "included in the recalculation of the grade point average.</p> <p>I: Incomplete (student performing satisfactorily, but unable to complete coursework due to valid reason).</p> <p>N: Used in cases where grades are not yet submitted.</p> <p>W: Withdrew before course drop deadline.</p> <p>WP: Student withdraws from University. Withdrew passing after course drop deadline (2 weeks after mid-term).</p> <p>WF: Student withdraws from University. Withdrew failing after course drop deadline (2 weeks after mid-term. WF is treated as an F (punitive grade).</p> <p>CR: Credit/pass</p> <p>NC: No credit/fail</p> <p>Z: Failed course for non-attendance/unofficial withdrawal</p>
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<p>3. No more than three absences total (excused or unexcused). 4. Seek help and show a sincere effort to come to class and participate.</p>	<p>(treated the same as an F grade). Last date of attendance is reported by faculty.</p>
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<p><b>Activities:</b></p>	<p>This is a lecture/lab based class. We will be doing case studies for each system. Labs are equally important and we will be studying physiological principles in the lab. We will be doing labs in groups of two and both lab partners need to turn in separate lab reports. I would prefer you having a separate notebook for lab. We will discuss how the lab book has to be maintained.</p>
<p><b>Policy Statements:</b></p>	<p><b>Class Conduct:</b> Students are expected to be on time to class. While in class you are expected to be an active participant and learner. I have zero tolerance for texting and I will take off points on your tests if you insist on texting in class. All cell phones have to be put on vibrate when in class. During tests no Student will use any electronic device or leave the room. If you leave the room, you will not be able to complete your test. So please go to the restroom before you come for the test and bring Kleenex with you in case you need it.</p>
<p><b>University Policies:</b></p>	<p><b><u>Academic Honesty:</u></b> Plagiarism and cheating are completely unacceptable in an institution of higher education and learning. Such behavior deprives the student involved of the desired education and development of an appropriate value system. It is extremely unfair to other students, and it severely diminishes the value and integrity of a University degree.  Plagiarism occurs whenever another's work is submitted as one's own. This includes the use of information from an Internet site or from a published author's ideas and words without proper attribution or documentation. It also includes the copying of term papers, other unpublished works, homework, case reports, computer programs and spreadsheets, and any other course assignments which are submitted for course credit as the student's own effort.  If I catch you cheating it will be an automatic F in the class.  All cases of plagiarism and cheating will be referred to the Vice President for Academic Affairs for possible further action. Additional penalties may be imposed for the egregious cases of plagiarism and cheating.</p>

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## **Drops and Withdrawals**

### Dropping Courses:

A course may be dropped up through the end of the second week of the semester without any record on the transcript. After this date, a course may be dropped up to two weeks after mid-term grade reports are due, with a W appearing on the transcript. Withdrawals after mid-terms must be approved by the Vice-president of academic Affairs.

In certain General Studies core courses, students' assignments to course sections may be changed by faculty with written notification given to the Registrar. In all other cases, a student wishing to move from one section of a course to another must accomplish this by using a drop-add form to drop the old section and add the new section.

### Withdrawal/Grading Policies

The following procedures will apply to all students withdrawing from the University. Grades will be given in regard to the time of withdrawal. Contact the Registrar's Office for forms and assistance.

- **W** (official withdrawal initiated by the student): To be given when a student withdraws between the first day of class/registration and the last day to drop courses, this is two weeks after mid-term exams.
- **AW** (unofficial withdrawal not initiated by the student): The student does not inform anyone that he/she is leaving campus ( the student walks out). The university may also administratively withdraw a student for disciplinary reasons, academic legal anytime during the semester.

### **Special Accommodations:**

A student who is ill or who has or develops medical conditions including but not limited to illness, physical or other disability or pregnancy must notify the Director of Health Services immediately.

**Contact Hours:** All classes meet for the full-time stated on schedule. Classes cannot be shortened or cancelled without prior permission. Cancelled classes must be rescheduled.

**Classroom Conduct:** No cell phone use, text messaging or music in class (After one warning you are marked as absent for that day). Interruption, disruption and inconsiderate behavior will also result in an *absence* being recorded for that day. The instructor reserves the right to drop any students who are underperforming in class and show a lack of interest and/or a lack of respect.

### **Course Policies :**

1. Attendance policy- there are no "excused," or "unexcused" absences. You can miss up to three classes for any reason, but you are still responsible for the lecture notes.
2. Avoid any academic dishonesty (plagiarism, cheating on tests). This can end your academic career.
3. ADA (American with Disabilities Act) Policy: "Students are responsible for informing the instructor of any instructional accommodation and/or special needs at the beginning of the semester."
4. To pass the class, you need to receive a passing grade on both the midterm and final exam.
5. Final exam will be comprehensive.

### **Weekly Schedules**

**Class Schedule** (Dr. Nagarajan reserves the right to update this schedule throughout the semester as necessary).

	<p>Study Guides will be given at least a week before each exam. These are GUIDES only.</p> <p>Week 1      Enzymes and Metabolism  <b>Test 1</b></p> <p>Week 2      Digestive System</p> <p>Week 3      Regulation of Metabolism</p> <p>Week 4      Physiology of Kidneys  <b>Test 2</b></p> <p>Week 5      Physiology of Kidneys</p> <p>Week 6      Nervous System</p> <p>Week 7      Nervous System</p> <p>Week 8      Musculoskeletal System</p> <p>Week 9      Endocrine System  Test 3</p> <p>Week 10     Heart and Circulatory System</p> <p>Week 11     Heart and Circulatory System</p> <p>Week 12     Respiratory System</p> <p>Week 13     Immune System  Test 4</p> <p>Week 14     Reproduction System</p> <p>Week 15     Reproduction System</p> <p><b>Week 16     Finals Week</b></p>
<b>Advising &amp; Tutorial Support:</b>	<b>Office hours posted on my office door</b>