# BSC 2093C HUMAN ANATOMY & PHYSIOLOGY I FALL 2013

**Instructor:** Jemima “Jackie” Lindbeck, M.D. Ph.D.

**Instructor’s Office:** Building 1 – Room 223 phone extension 1961 (407-582-1961)

Office Hours: **M** 7:30 am – 9:45 am

 **T**  7:30 am – 8:15 am

 **W** 7:30 am – 9:45 am

 **R** 7:30 am – 11:15 am

 **F** 7:30 am – 8:30 am

Class hours: CRN 11279 Mon & Wed 11:30 am – 12:45 pm (HSB 146)

 CRN 11280 Tue & Thu 11:30 am – 12:45 pm (HSB 146)

Lab hours: CRN 11279 Mon 2:00 pm – 4:45 pm (HSB-132)

 CRN 11280 Tue 8:30 am – 11:15am (HSB-132)

**E-mail:**  **jlindbeck@mail.valenciacollege.edu**

 OR **jlindbeck@hotmail.com**

 (Please identify yourself as a student in the subject line)

**Text:** Principles of Anatomy & Physiology 13th edition

 Gerard J. Tortora & Bryan Derrickson

 [ISBN 978-0-470-56510-0 13th edition hardcover – comes packaged with:

 Brief Atlas of the Skeleton, Surface Anatomy & Selected Medical Images]

 (NOTE: it is permitted to use an older edition to save money)

**Course Description:** BSC 2093C is the first half of a two-semester course dealing with the anatomy and physiology of the human body. The topics to be covered are as follows:

Chapter 1: An introduction to the human body

Chapter 2: The chemical level of organization

Chapter 3: The cellular level of organization

Chapter 4: The tissue level of organization

Chapter 5: The integumentary system (skin)

Chapters 6,7,8,9: The skeletal system and joints

Chapters 10,11: The muscular system

Chapters 12,13,14,15,16,17, 18: The nervous & endocrine system

**Grading Scale:** Points from quizzes (5-10 points each), exams (100 points each), and lab assignments (5-10 points each) will be added together and divided by the total points possible.

 A 90-100%

 B 80-89%

 C 70-79%

 D 60-69%

 F less than 60%

**Absences and Tardiness:** Attendance and participation is expected of all students. After three absences a student may be withdrawn from the course by the instructor. If you know that you are intending to withdraw from the class yourself please inform me of your intent and withdraw yourself. Do not wait for me to withdraw you. I do not total the absences and re-evaluate your status on a daily basis. I reserve the right to allow a student to remain in the class for cases of extreme personal hardship combined with the students’ expression of their dedication to continuing the class. If a student remains in the class in spite of three absences, the student may still be withdrawn if additional absences accrue. After the withdrawal deadline you will not be able to withdraw. AFTER THE WITHDRAWAL DEADLINE I WILL NOT WITHDRAW ANY STUDENT.

According to Valencia policy, any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of “F”. Students on Bright Futures Scholarships who withdraw or are withdrawn from a class must pay the college for the cost of the class because the college must refund that cost to the state.

If a student enters the classroom after attendance has been taken it is his/her responsibility to see the teacher after class to get some credit for attendance. Three late arrivals (or early departures) may be considered the equivalent of one absence. Coming very late or leaving as soon as attendance has been taken is considered the same as being absent.

Make-up exams will generally be offered at the time of the final exam and only for cases of extreme hardship. There should be sufficient time during the allotted 2-2.5 hours for the final exam to also be able to take a make-up exam then. A 10% penalty will be assessed on any score gotten on a make-up exam done at the time of the final exam. For example if you get 90% of the available points on a makeup exam then the penalty of 10% will result in you being awarded 80% as your score for that exam.

If you miss more than one exam in the semester I will drop you from the class. In my experience students who miss more than one exam get too far behind to pull themselves out of trouble. They are not able to study for the new material and study for the old material in the time they have left, so they do poorly on either the makeup exams, the on-time exams, or both.

Lab assignments often cannot be made-up, discuss your options with the teacher if labs are missed.

Quizzes missed for cases of extreme hardship may be replaced by a number based on your exam score covering the same material as the quiz but with a 10% penalty.

**Hurricane related class cancellations: [hurricane season = June 1 – November 30]**

If a hurricane is headed our way, and the college administration decides it is necessary to close the college, classes will be cancelled for whatever length of time is deemed appropriate. You can find out whether Valencia College will be closed by calling the campus phone number:

**407-299-5000**

## Valencia College also has developed a Valencia College Emergency Website:

**http://valenciacc.info**

where you can check for any emergency related information being given out by the college.

The Valencia College Emergency Website is linked to my class website, as is the website of the National Hurricane Center:

**http://www.nhc.noaa.gov**

where you can obtain all the latest hurricane predictions and find links to maps and radar images.

**Valencia Alerts:**

Once you register for Valencia Alerts, emergency alerts, notifications, and updates can be sent to you via e-mail, cell phone, pager, and/or smart phone/PDA. Messages about campus closures due to a broken water main, reports of a gunman on campus etc., could make use of this system. To sign up for Valencia Alerts go to ATLAS and click on the Valencia Alert panel located on the Home Page.

**Getting Help with Personal Issues:**

Valencia College is interested in making sure all our students have a rewarding and successful college experience. To that purpose, Valencia students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management, as well as relationship problems dealing with school, home, or work. Bay Care Behavioral Health Student Assistance Program (SAP) Services are free to all Valencia students and available 24 hours a day by calling:

 **(800) 878-5470**. Free face-to-face counseling is also available.

Please also check out the link on my class website labeled: Guide to Local Clinics and other Resources.

I have provided links to many local and national agencies, hotlines, and helplines, related to specific aspects of physical health, mental health and wellbeing, victim resources, and hardship resources, as well as Baycare Behavioral Health Student Assistance Program.

**Courtesy for others in maintaining a learning environment:**

Your classmates will learn best if they can listen to and participate in classroom activities without distractions and interruptions. You are expected to refrain from holding private conversations while a teacher or classmate is addressing the class. Upon entering the class you are expected to turn off cell phones, beepers, and loud alarm watches. If your presence is disturbing to classmates you may be requested to make a seating change or leave the classroom. Children are not permitted to attend class with you.

**Students with Disabilities:**

Students with disabilities who qualify for academic accommodations ***must provide a letter from the Office for Students with Disabilities (OSD)*** and discuss specific needs with the professor, preferably during the first week of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities (West Campus SSB 102, ext. 1523).

**WebSite:** http://humanbody.homestead.com

I have created a website which contains **links to additional information and resources** for students interested in exploring more than is in the textbook. Some of the material at the sites linked here may also be incorporated into lectures. I welcome any student suggestions for sites to be included.

Other features of the website include:

a **career guide** to find out more about careers commonly chosen by A & P students

a **calendar of class lectures** so that you can see where we are and plan to be in our schedule

a **referral guide to local clinics** (in case you become ill or paranoid about your health, etc)

a **copy of class study guides** (so you can print out your own copy)

a link to WebCT where you can access **my powerpoint presentations**

If you want to access the class website but do not have a computer of your own, the Valencia College Learning Resources Center has a Microcomputer Assistance Center (MAC) where someone can assist you. All you need is a student ID card. Printing pages at the MAC cost 10 cents/page last time I checked.

**Disclaimer:**

Although I have an MD degree I quit practicing when my daughter was born in 1996. Consequently I no longer have a medical license nor do I keep as current on the latest developments in medicine as I used to. Anything that I say in class or in personal conversation should not be construed as constituting medical advice. Whatever I say is merely as your teacher. I am not your physician.

**Academic Responsibility:**

You are expected to take full responsibility for your own education. If you have special needs you need to inform your instructor. You must have time to study appropriately for this course. A rule of thumb for most courses is that you should spend a minimum of two hours studying outside of class for every hour in class. It is highly recommended that you actively pursue any help that you can get from studying with classmates, and getting assistance from tutors and teachers. Only you can balance your study time with the other demands of your life. Taking responsibility for your own education also means you will commit yourself to intellectual honesty. You cannot receive the learning benefits of this class if you do not master the material for yourself. You should not cheat or assist others in cheating. I will be following the College Policy on Academic Dishonesty (see the relevant policy reproduced from the Valencia College Website)

**Policy Statement:**

1. All forms of academic dishonesty are prohibited at Valencia College. Academic dishonesty includes, but is not limited to, acts or attempted acts of plagiarism, cheating, furnishing false information, forgery, alteration or misuse of documents, misconduct during a testing situation, facilitating academic dishonesty, and misuse of identification with intent to defraud or deceive.
2. All work submitted by students is expected to be the result of the students' individual thoughts, research, and self-expression. Whenever a student uses ideas, wording, or organization from another source, the source shall be appropriately acknowledged.
3. Students shall take special notice that the assignment of course grades is the responsibility of the students' individual professor.

**Procedure Statement:**

Anyone observing an act of academic dishonesty may refer the matter to the professor, as an academic violation, and/or to the Dean of Students or designee, as a violation of the Student Code of Conduct (6Hx28:8-03). When the professor has reason to believe that an act of academic dishonesty has occurred, the professor may proceed in one of three ways:

1. The professor may choose to consider the act of academic dishonesty to be an academic offense, and using his/her academic judgment may assign an academic sanction to the responsible student, following a discussion of the matter with the student and any other appropriate persons. Academic penalties may include, without limitation, one or more of the following: loss of credit for an assignment, examination, or project; withdrawal from course; a reduction in the course grade; or a grade of "F" in the course. If the student disagrees with the decision of the professor, the student may seek a review of the decision subject to and in accordance with Policy 6Hx28:8-10, Student Academic Dispute and Administrative Complaint Resolution.
2. The professor may choose to consider the act of academic dishonesty to be a violation of the Valencia Student Code of Conduct, and may refer the matter for resolution in accordance with Policy 6Hx28:8-03. Disciplinary penalties for academic dishonesty may include, without limitation, warning, probation, suspension and/or expulsion from the College. Any appeal of disciplinary sanctions will occur subject to and in accordance with Policy 6Hx28:8-03.
3. The professor may choose to consider the act of academic dishonesty as warranting both an academic and disciplinary sanction. In this case, a professor should refer the matter for resolution in accordance with Policy 6Hx28:8-03, Student Code of Conduct, and when appropriate, should withhold any academic sanctions until such time as the disciplinary process is concluded and the student has been found responsible for violating college policy. If the student is found responsible for violating the Student Code of Conduct, the professor may then assign academic sanction in addition to any assigned disciplinary sanction. Any appeal of disciplinary sanctions will occur subject to and in accordance with Policy 6Hx28:8-03, and any review of academic sanctions will occur subject to and in accordance with Policy 6Hx28:8-10.

**Course Schedule:**

The course schedule below is to be considered tentative. It gives only the sequence in which we will cover chapters but not the dates. You will be given updates on dates as we go along. You can check Appendix A for an estimate of when exams might occur based on previous semesters. This will give you a rough idea of how quickly / slowly we will move through the course material.

**TENTATIVE** **COURSE SCHEDULE – SUBJECT TO CHANGE!**

“LAB” SEQUENCE

mostly occurs in the lab room

Study will consist mostly of memorization of names of structures and mentally connecting the names to images. Some (not all) students may learn more by studying powerpoints and atlases than the textbook.

7. Axial Skeleton: cranial bones

7. Axial Skeleton: facial bones / vertebrae / ribs

8. Appendicular Skeleton: upper limb & lower limb

 EXAM OVER 7 & 8

9. Joints / Motions

11. Muscles: Names, Origins, Insertions & Actions

 EXAM OVER 9 & 11

“LECTURE” SEQUENCE

mostly occurs in the lecture classroom

Study over this material will consist of learning concepts, definitions, processes, and applications of knowledge – reading the textbook will be very important!

1. Intro to Human Body

2. Chemistry EXAM OVER 1 & 2

3. Cells

4. Tissues (also in lab) EXAM OVER 3 & 4

5. Skin

6. Bone (\*) EXAM OVER 5 & 6

12. Nervous Tissue (\*)

10. Muscle Tissue (\*) EXAM OVER 12 & 10

(\*) = there will also be some microscope work)

LECTURE AND LAB (MORE SYNCHRONIZED)

13. Spinal Cord & Nerves (Check Reflexes)

14. Brain & Cranial Nerves (Dissect Sheep Brain & Clinical Neurologic Exam)

15: Autonomic Nervous System – (Identify drugs as agonists or antagonists ) EXAM OVER 13 & 14 & 15

16. Sensory, Motor & Integrative Systems

17. Special Senses – smell, taste, sight, hearing, balance (vision exercises)

18. Endocrine System EXAM OVER 16 & 17 & 18

Information about Grades: Please do not ask me to give out your grade by phone or by e-mail. The proper security measures and forms are not in place for me to guarantee that only the student has access to their grades (and not someone else who shares the student’s phone or e-mail or who pretends to be the student). I am not going to risk violating federal regulations about nondisclosure of confidential student information (Family Educational Rights and Privacy Act – FERPA – U.S.C. § 1232g; 34CFR Part 99). If you wish to know your grade before it is posted in Atlas or before you see me in class you will have to catch me in person.

|  |
| --- |
| **Detailed *TENTATIVE* Schedule – highly subject to change – Please update via website!!!!** |

WEEK ONE

Mon Aug 26 - Discuss syllabus & website. Lecture: part of chapter 1 -directional terminology, planes & sections. **Quiz over terms.**

**Lab - cranial bones/sutures/fontanelles**

**We will use the** [**lab pages for skull bones**](http://humanbody.homestead.com/LabHandoutsSkull.html) **(in future labs, you will be responsible for printing your own lab pages, but since it is the first day of class, I will provide these)**

Wed Aug 28 - Finish chapter 1.

WEEK TWO

Mon Sep 2 - **LABOR DAY - NO CLASSES**

**(No LAB this week - but we will make up for that next week by covering more than the Tue/Thu section)**

Wed Sep 4 - **Quiz over chapter 1.** Start chapter 2...

WEEK THREE

Mon Sep 9 - Continue...

**Quiz over cranial bones/sutures/fontanelles**

**(lab - facial bones/ vertebrae/ribs)**

**Please print and bring the** [**lab pages for the vertebrae and ribcage bones**](http://humanbody.homestead.com/LabHandoutsVertebraeRibcage.html) **(and bring your skull pages from the first week, to complete).**

Wed Sep 11 - Continue...

WEEK FOUR

Mon Sep 16 - Continue...

**Quiz over facial bones/vertebrae/ribcage**

**(lab - upper limb/shoulder & lower limb/hip)**

**Please print and bring:**

[**(1) the pages for the upper limb and shoulder bones**](http://humanbody.homestead.com/LabHandoutsUpperLimbShoulder.html)

[**(2) the pages for the lower limb and hip bones**](http://humanbody.homestead.com/LabHandoutsLowerLimbHip.html)

Wed Sep 18 - Continue...

WEEK FIVE

Mon Sep 23 - Continue...

**There will NOT be a quiz over upper limb/shoulder** **for points - only for practice**

**(lab - joints/motions) Please print and bring:**

[**the pages for motions at joints of the body.**](http://humanbody.homestead.com/LabHandoutsMotions.html)

Wed Sep 25 - **Exam chapter 1 & 2**

WEEK ONE

Tue Aug 27 - Discuss syllabus & website. Lecture: part of chapter 1 -directional terminology, planes & sections. **Quiz over terms.**

**Lab - cranial bones/sutures/fontanelles**

**We will use the** [**lab pages for skull bones**](http://humanbody.homestead.com/LabHandoutsSkull.html) **(in future labs, you will be responsible for printing your own lab pages, but since it is the first day of class, I will provide these)**

Thu Aug 29 - Finish chapter 1.

WEEK TWO

Tue Sep 3 - Start chapter 2 up to...

**Quiz over cranial bones/sutures/fontanelles**

**(lab - facial bones)**

**(You will need to bring your skull pages from last week to lab again)** Thu Sep 5 - **Quiz over chapter 1.** Continue...

WEEK THREE

Tue Sep 10 - Continue...

**Quiz over facial bones**

**(lab - vertebrae/ribs)**

**Please print and bring the** [**lab pages for the vertebrae and ribcage bones.**](http://humanbody.homestead.com/LabHandoutsVertebraeRibcage.html)

Thu Sep 12 - Continue...

WEEK FOUR

Tue Sep 17 - Continue...

**Quiz over vertebrae/ribcage**

**(lab - upper limb/shoulder & lower limp/hip)**

**Please print and bring:**

[**(1) the pages for the upper limb and shoulder bones**](http://humanbody.homestead.com/LabHandoutsUpperLimbShoulder.html)

[**(2) the pages for the lower limb and hip bones**](http://humanbody.homestead.com/LabHandoutsLowerLimbHip.html)

Thu Sep 19 - Continue...

WEEK FIVE

Tue Sep 24 - Finish 3. Start 4 up to tight junctions.

**There will NOT be a quiz over upper limb/shoulder** **for points - only for practice**

**(lab - joints/motions) Please print and bring:**

[**the pages for motions at joints of the body.**](http://humanbody.homestead.com/LabHandoutsMotions.html)

Thu Sep 26 - **Exam chapter 1 & 2**

WEEK SIX

Tue Oct 1 - Continue...

**There will not be a quiz over motions**

**(lab -muscles [chapter 11] - I will provide this as a handout - unless I finish revising it in time to put a new version online)**

Thu Oct 3 - **Exam chapters 7 & 8 (all powerpoint)**

WEEK SEVEN

Tue Oct 8 - Continue...

**Quiz over six muscles (deltoid, coracobrachialis, latissimus dorsi, teres major, supraspinatus, pectoralis major)**

**(lab - microscope A -start drawing tissues)**

**(lab - group work identifying epithelial tissues)**

**Please print and bring TWO sets of pages to lab:**

[**(1) the lab pages called "Tissue identification guide"**](http://humanbody.homestead.com/LabHandoutsTissueIdentificationGuide.html)

[**(2) the lab pages called "Microscope work".**](http://humanbody.homestead.com/LabHandoutsMicroscopeWorkSheets.html)

Thu Oct 10 - Continue...

WEEK EIGHT

Tue Oct 15 - Continue...

NO MORE LAB QUIZZES FOR THE REST OF THE SEMESTER

**(lab - microscope B - finish drawing tissues)**

**(lab - group work identifying connective tissues)**

**Please bring back pages from last week to finish using and completing them.**

Thu Oct 17 - **COLLEGE NIGHTS - NO CLASSES**

WEEK NINE

Tue Oct 22 - Continue...

**Lab - Review answers to group work.**

**Draw bone tissue based on microscope work.**

**Please print out and bring to lab the page called:**

[**"Lab on Bone tissue (microscope work)"**](http://humanbody.homestead.com/LabHandoutsMicroBONE.html)

Thu Oct 24 - **Exam chapters 9 & 11 (all powerpoint)**

WEEK TEN

Tue Oct 29 - Continue...

**Lab - Draw neurons based on microscope work.**

**Please print out and bring to lab the handout called:**

[**"Lab on Neurons (microscope work)"**](http://humanbody.homestead.com/LabHandoutsMicroNERVE.html)

Thu Oct 31 - **Exam chapters 3 & 4**

**Fri Nov 1 = Final Withdrawal Deadline]**

**after this date you will not be able to withdraw and I will not withdraw you either**

WEEK ELEVEN

Tue Nov 5 - Continue...

**Draw muscle tissue based on microscope work.**

**Please print out and bring to lab the page called:**

[**"Lab on Muscle tissue (microscope work)"**](http://humanbody.homestead.com/LabHandoutsMicroMUSCLE.html)

**Note: This is a DIFFERENT page than the muscle pages with pictures of muscles and lists of origins, insertions and actions.**

Thu Nov 7 - **Exam chapters 5 & 6**

WEEK SIX

Mon Sep 30 - Continue...

**There will not be a quiz over motions**

**(lab - muscles [chapter 11] - I will provide this as a handout - unless I finish revising it in time to put a new version online)**

Wed Oct 2 - **Exam chapters 7 & 8 (all powerpoint)**

WEEK SEVEN

Mon Oct 7 -Continue...

**Quiz over six muscles (deltoid, coracobrachialis, latissimus dorsi, teres major, supraspinatus, pectoralis major)**

**(lab - microscope A - start drawing tissues)**

**(lab - group work identifying epithelial tissues)**

**Please print and bring TWO sets of pages to lab:**

[**(1) the lab pages called "Tissue identification guide"**](http://humanbody.homestead.com/LabHandoutsTissueIdentificationGuide.html)

[**(2) the lab pages called "Microscope work".**](http://humanbody.homestead.com/LabHandoutsMicroscopeWorkSheets.html)

Wed Oct 9 - Continue...

WEEK EIGHT

Mon Oct 14 - Continue...

NO MORE LAB QUIZZES FOR THE REST OF THE SEMESTER

**(lab - microscope B - finish drawing tissues)**

**(lab - group work identifying connective tissues)**

**Please bring back pages from last week to finish using and completing them.**

Wed Oct 16 - Continue...

WEEK NINE

Mon Oct 21 - Continue...

**Lab - Review answers to group work.**

**Draw bone tissue based on microscope work.**

**Please print out and bring to lab the page called:**

[**"Lab on Bone tissue (microscope work)"**](http://humanbody.homestead.com/LabHandoutsMicroBONE.html)

Wed Oct 23 - **Exam chapters 9 & 11 (all powerpoint)**

WEEK TEN

Mon Oct 28 - Continue...

**Lab - Draw neurons based on microscope work.**

**Please print out and bring to lab the page called:**

[**"Lab on Neurons (microscope work)"**](http://humanbody.homestead.com/LabHandoutsMicroNERVE.html)

Wed Oct 30 - **Exam chapters 3 & 4**

**[Fri Nov 1 = Final Withdrawal Deadline]**

**after this date you will not be able to withdraw and I will not withdraw you either**

WEEK ELEVEN

Mon Nov 4 - Continue...

**Draw muscle tissue based on microscope work.**

**Please print out and bring to lab the page called:**

[**"Lab on Muscle tissue (microscope work)"**](http://humanbody.homestead.com/LabHandoutsMicroMUSCLE.html)

**Note: This is a DIFFERENT page than the muscle pages with pictures of muscles and lists of origins, insertions and actions.**

Wed Nov 6 - **Exam chapters 5 & 6**

WEEK TWELVE

Mon Nov 11 - Continue...

**(lab - perform neurologic evaluation of partner including DTRs)**

**Please print and bring all lab pages for Neurologic evaluation of a partner:**

[**(1) the page for deep tendon reflexes (DTRs)**](http://humanbody.homestead.com/LabHandoutsDTRs.html)

[**(2) the one page report**](http://humanbody.homestead.com/LabHandoutsNeuroEvaluation.html)

[**(3) the three page guide to filling in the one page report**](http://humanbody.homestead.com/LabHandoutsNeuroEvaluation.html)

Wed Nov 13 - **Exam over 12 (nervous tissue) & 10 (muscle tissue)**

WEEK THIRTEEN

Mon Nov 18 - Continue...

**(Lab - group work to identify interactions of medications with the Autonomic Nervous System)**

**Please print and bring pages called:**

[**Autonomic Nervous System: drugs that act as agonists or antagonists at receptors of the ANS.**](http://humanbody.homestead.com/LabHandoutsANSAgonistsAntagonists.html)

Wed Nov 20 - Continue...

**(there will be some lab points incorporated into the vision lecture) You do not need to print anything for vision exercises - I will provide laminated re-usable cards with pictures on them.**

WEEK FOURTEEN

Mon Nov 25 - Continue...

**(lab - sheep brain dissection)**

**You do not need to print and bring any pages for the sheep brain dissection. I will provide re-usable laminated cards with labeled pictures of the sheep brain.)**

Wed Nov 27 - **THANKSGIVING - NO CLASSES**

WEEK FIFTEEN

Mon Dec 2 - Continue...

**(Lab Time - left open at this time - may be used to do an earlier lab that we were not able to do on the date originally scheduled - or may be used for a lab yet to be developed)**

Wed Dec 4 - **Exam over 13 (spinal cord) & 14 (brain) and 15 (autonomic nervous system)**

FINAL EXAM WEEK

**Wed Dec 11 - 10:00-12:30 FINAL EXAM**

**Exam over 16 (pathways in the nervous system) & 17 (special senses) & 18 (endocrine system)**

WEEK TWELVE

Tue Nov 12 - Continue...

**(lab - perform neurologic evaluation of partner including DTRs)**

**Please print and bring all lab pages for Neurologic evaluation of a partner:**

[**(1) the page for deep tendon reflexes (DTRs)**](http://humanbody.homestead.com/LabHandoutsDTRs.html)

[**(2) the one page report**](http://humanbody.homestead.com/LabHandoutsNeuroEvaluation.html)

[**(3) the three page guide to filling in the one page report**](http://humanbody.homestead.com/LabHandoutsNeuroEvaluation.html)

Thu Nov 14 - **Exam over 12 (nervous tissue) & 10 (muscle tissue)**

WEEK THIRTEEN

Tue Nov 19 - Continue...

**(Lab - group work to identify interactions of medications with the Autonomic Nervous System)**

**Please print and bring pages called:**

[**Autonomic Nervous System: drugs that act as agonists or antagonists at receptors of the ANS.**](http://humanbody.homestead.com/LabHandoutsANSAgonistsAntagonists.html)

Thu Nov 21 - Continue...

**(there will be some lab points incorporated into the vision lecture) You do not need to print anything for vision exercises - I will provide laminated re-usable cards with pictures on them.**

WEEK FOURTEEN

Tue Nov 26 - Continue...

**(lab - sheep brain dissection)**

**You do not need to print and bring any pages for the sheep brain dissection. I will provide re-usable laminated cards with labeled pictures of the sheep brain.)**

Thu Nov 28 - **THANKSGIVING - NO CLASSES**

WEEK FIFTEEN

Tue Dec 3 - Continue...

**(Lab Time - left open at this time - may be used to do an earlier lab that we were not able to do on the date originally scheduled - or may be used for a lab yet to be developed)**

Thu Dec 5 - **Exam over 13 (spinal cord) & 14 (brain) and 15 (autonomic nervous system)**

FINAL EXAM WEEK

**Thu Dec 12 - 10:00-12:30 FINAL EXAM**

**Exam over 16 (pathways in the nervous system) & 17 (special senses) & 18 (endocrine system)**

**DISCLAIMER:** The course instructor reserves the right to make changes in the course outline, class schedule and syllabus.