

Anatomy & Physiology II

BIOL-2402

Summer II 2021 Section N02 CRN-40737 4 Credits 07/12/2021 to 08/09/2021 Modified 07/02/2021

Meeting Times

This is a fully online course - there are no live lecture or lab sessions.

All lectures and labs will consist of utilizing electronic materials and viewing recorded lectures and lab videos **at your own time but before the indicated deadlines** shown on eCampus and/or the course schedule. Some labs will also consist of completion of electronically simulated lab activities.

All exams will be proctored (using Honorlock) and completed online and the place of your choice. **A computer, stable internet connection, webcam, and microphone are required for testing in addition to a testing environment that resembles that of a classroom (quiet, no distractions or people, etc.).**

Contact Information

Instructor: Katherine Barker

Email: katherine.barker@blinn.edu

Phone: 979-830-4379

Office Hours

Tuesday, 11:00 AM to 11:30 AM, Zoom

[Tuesday Office Hour Zoom Link \(https://blinn-edu.zoom.us/j/89397889125?pwd=OVFBb2NLa0drQ2t2NFZJS2Z6ZHA2UT09\)](https://blinn-edu.zoom.us/j/89397889125?pwd=OVFBb2NLa0drQ2t2NFZJS2Z6ZHA2UT09)

Meeting ID: 893 9788 9125; Passcode: 328526

Thursday, 9:30 AM to 10:00 AM, Zoom

[Thursday Office Hours Zoom Link \(https://blinn-edu.zoom.us/j/84829693576?pwd=cE4xaldtL1rN1NOWGNNZFBxRUUrQT09\)](https://blinn-edu.zoom.us/j/84829693576?pwd=cE4xaldtL1rN1NOWGNNZFBxRUUrQT09)

Meeting ID: 848 2969 3576; Passcode: 950931

Though my "official" office hours are listed above, please feel free to call me anytime between 9:00 am and 5:00 pm. If I don't answer, please leave a message with your name, number, and a brief description of the issue and I will call you back as soon as I can.

Email and Phone Message Responses: I check my email several times a day during normal business hours, so expect less than a 24 hour response time during normal weekdays. I do check my email on weekend when I have time, but I do not guarantee a 24 hour turn around on weekend emails or phone calls. **Email is the fastest response time.**

Description

3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours.

Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. Anatomy and Physiology II is the second course in a two semester sequence which examines the systems of the human body using an integrated approach.

Requisites

Prerequisites: Biology 2401 with a grade of "C" or better.

★ Core Curriculum Statement

Through the Texas Core Curriculum, students will gain a foundation of knowledge in human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning. For details relating to this core course, please see:

<http://www.blinn.edu/academics/core-curriculum.html> (<http://www.blinn.edu/academics/core-curriculum.html>)

||| Outcomes

Lecture Based Outcomes

Use anatomical terminology to identify and describe locations of major organs of each system covered.

Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.

Describe the interdependency and interactions of the systems.

Explain contributions of organs and systems to the maintenance of homeostasis.

Identify causes and effects of homeostatic imbalances.

Describe modern technology and tools used to study anatomy and physiology.

Lab Based Outcomes

Apply appropriate safety and ethical standards.

Locate and identify anatomical structures.

Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.

Work collaboratively to perform experiments.

Demonstrate the steps involved in the scientific method.

Communicate results of scientific investigations, analyze data and formulate conclusions.

Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations, and predictions.

☰ Materials

1. **Electronic Lab Manual** access using the Tophat website: *Anatomy and Physiology II 3rd edition Blinn College*. ISBN: 978-1-64386-440-2 Title: Biology 2402/A&P II LM-3E

To access the lab book through the Blinn bookstore if using scholarship or financial aid, please go to the following website:

[tophat.com/bookstore](https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Ftophat.com%2Fbookstore&data=02%7C01%7Cvandana.sarin%40blinn.edu%7Ccbaa068cd8ed4329169e08d7ed62) (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Ftophat.com%2Fbookstore&data=02%7C01%7Cvandana.sarin%40blinn.edu%7Ccbaa068cd8ed4329169e08d7ed62>)

<http://tophat.com/bookstore> (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Ftophat.com%2Fbookstore&data=02%7C01%7Cvandana.sarin%40blinn.edu%7Ccbaa068cd8ed4329169e08d7ed62>)

[89a2%7C60448a85d0074d57a583bfec98e99c29%7C1%7C0%7C637238879786291598&sdata=Y0CeyMCXhOxW3vcBPVB7UbMAuN5NiK6NQBIMgkDuvJ4%3D&reserved=0](https://www.mhhe.com/9780077238879/97800772388791598&sdata=Y0CeyMCXhOxW3vcBPVB7UbMAuN5NiK6NQBIMgkDuvJ4%3D&reserved=0)).

You may instead purchase the lab manual directly from the TopHat website at [TopHat Manual Link](https://app.tophat.com/e/497314) (<https://app.tophat.com/e/497314>) Join Code: 497314

2. McGraw-Hill “Connect access code” for the learning platform. You may purchase this through the bookstore if using scholarship or financial aid. Otherwise, the code can be purchased with an etextbook or separately online. You will need the code and the link provided through eCampus to access the mandatory assignments. (The access code is the same as purchased for Anatomy & Physiology I at Blinn College and you will likely not need to purchase additional access. Furthermore, access is valid for 12-18 months; therefore, I recommend checking if your current access code is still valid before purchasing.)

3. Textbook: *Anatomy Physiology-The Unity of Form and Function*, 9th Edition, Saladin, McGraw-Hill if you don't have access to electronic textbook. (The textbook is the same as purchased for Anatomy & Physiology I at Blinn College. You can also access the electronic text using the Connect access code described above.)

4. Computer access that meets Blinn College Distance Learning Standards:

- <http://www.blinn.edu/online/technical/ecampus-tech.html>

5. A working webcam and microphone is necessary for proctored exams; a headset is necessary to hear online videos if your computer has no speakers.

Optional but highly recommended online resources:

- **Brightspace Pulse** is an app that allows seamless connection to eCampus. Search "Brightspace Pulse" and download from the App Store. After logging in, you will have access to all features of your eCampus courses. I recommend enabling notifications so that you are instantly alerted of course announcement and grade updates.
- **A&P Revealed** is an online dissection and physiology review site. Access A&P Revealed via the McGraw Hill Connect website. This resource is included in the Connect access code materials at no additional charge.
- **Visible Body** is a resource of no additional charge. You can access visible body software from any computer on Blinn campus by clicking on the following link: <http://aandp.visiblebody.com/>. You can also access the software from home by clicking on the following link: <http://kidd.blinn.edu:2048/login?url=http://aandp.visiblebody.com/>

Course Requirements

4 Lecture Exams counting 40% of the total course grade. Lecture exams cover material presented in both lecture in a multiple choice 60-70 question format. **The lecture exams are online. The exams will be taken using the online Honorlock proctor.**

4 Lab Exams counting 20% of the total course grade. Lab exams cover material presented in lab and covered in lab manual activities, scenarios, and videos. Lab exams are 50 multiple choice questions that include sequencing, labeling of model and histology images, interpretation of data, and calculations. **The lab exams are online. An electronic calculator is provided online (use of a physical calculator is not allowed).** The exams will be taken using the online Honorlock proctor.

1 Final Exam counting 20% of the total course grade. The final exam is comprehensive, covering the entire course content. This final is important as it constitutes 20% of your overall grade. **The exam will be taken using the online Honorlock proctor. The final exam schedule is posted on the Blinn College website and is also provided in the course schedule.**

Quizzes category amounts to 5% of the total course grade. The 2 lowest scored quizzes will be dropped. Quizzes will be completed on the McGraw-Hill Connect website. Links to the quizzes can be found in the eCampus course content and on the Connect website. Deadlines can be found in the eCampus course calendar, McGraw-Hill calendar, and in the syllabus.

Homework category amounts to 5% of the total course grade. The 2 lowest scored homework will be dropped. Homework will be completed on the McGraw-Hill Connect website. Links to the homework can be found in the eCampus course content and on the Connect website. Deadlines can be found in the eCampus course calendar, McGraw-Hill calendar, and in the syllabus.

TopHat Lab Manual Assignments category amounts to 5% of the total grade. TopHat is the electronic version of the lab manual containing matching and labeling assignments. Completing the labs will count as a grade as well as for attending the lab portion of this online course. Links to the TopHat platform can be found in the eCampus course content. Deadlines can be found in the syllabus course schedule. Completion of each lab manual assignment will also count as attending the lab portion of this online course. [TopHat Manual Link \(https://app.tophat.com/e/497314\)](https://app.tophat.com/e/497314) Join Code: 497314

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email ([support@tophat.com \(mailto:support@tophat.com\)](mailto:support@tophat.com)), the in-app support button, or by calling 1-888-663-5491.

Smartbook Bonus category amounts to 5% bonus. Smartbook activities will be completed on the McGraw-Hill Connect website. Links to Smartbook can be found in the eCampus course content and on the Connect website. Deadlines can be found in the eCampus course calendar, McGraw-Hill calendar, and in the syllabus.

YuJa Lecture Recording Viewing category amounts to 5% of the total grade. YuJa is the name of the technology used to view lecture recordings. Viewing lecture recordings will count as attending the lecture portion of this online course. A grade will be awarded for answering embedded quiz questions while viewing the lecture recordings. Links to the YuJa lecture recordings for each lecture chapter can be found in the eCampus course content. Deadlines for viewing each lecture recording can be found in the syllabus course schedule.

✓ Evaluation

4 Lecture Exams	40%
4 Lab Exams	20%
1 Final Exam	20%
Quizzes (McGraw-Hill Connect)	5%
Homework (McGraw-Hill Connect)	5%
Lab Activity Participation (TopHat electronic lab manual & CONNECT virtual simulations)	5%
Lecture Recording Viewing	5%
TOTAL	100%

Breakdown

100-89.5%=A

89-79.5%=B

79-69.5%=C

69-59.5%=D

<59.5%=F

Blinn College Policies

All policies, guidelines, and procedures in the [Blinn College Catalog \(http://catalog.blinn.edu/\)](http://catalog.blinn.edu/), [Blinn College Board Policies \(http://pol.tasb.org/Home/Index/1204\)](http://pol.tasb.org/Home/Index/1204), and the [Blinn College Administrative Regulations \(https://www.blinn.edu/administrative-regulations/\)](https://www.blinn.edu/administrative-regulations/) are applicable to this course.

[Specific information on civility, attendance, add/drop, scholastic integrity, students with disabilities, final grade appeal, alternative retailers, campus carry and proctoring arrangements and cost. \(http://www.blinn.edu/syllabus-policies/\)](http://www.blinn.edu/syllabus-policies/)

Notice of any action taken under these protocol and procedures, by Blinn College or its employees, may be delivered by hand, through the U.S. Postal Service, or electronically to the student's Blinn Buc e-mail account. Notice shall be deemed received upon actual receipt, on deposit in the U.S. Mail, or upon entering the information processing system used by Blinn College for Blinn Buc e-mail accounts, whichever first occurs.

Information about the changes Blinn has made to the May Minimester, Summer I, and Summer II semesters: [Back with Blinn \(https://www.blinn.edu/back-with-blinn/index.html\)](https://www.blinn.edu/back-with-blinn/index.html).

* Course Policies

Absence Policy: Excessive absence may lead to administrative withdrawal from the course. Upon accumulating 2 unexcused absences, you will receive an e-mail from the college and must meet with the instructor concerning your absences before returning to class. Upon accumulating a total of 6 unexcused absences, you will be administratively dropped from the course due to excessive absence. In order to begin the reinstatement process, you must have a meeting with your instructor and complete a reinstatement form. Reinstatement decisions are approved by the Dean of Biology. **Not completing the online assignments (such as lab activities and/or viewing YuJa lecture recordings) each will count as one unexcused absence.** For example, viewing the chapter 18 lecture recording but not completing the corresponding lab will count as 1 absence.

No exam or final exam make-ups are allowed.

Bonus points: Optional Smartbook online Connect activities will count 5% Bonus of the course grade. There will be no extra credit projects, additional make-up assignments, or additional dropped or replacement grades. No exceptions.

Tutoring: Blinn now provides tutoring services at no additional cost. Please go to the course homepage and click on "Tutoring". Click "Meet with a Tutor" and search for a subject or specific tutoring coach.

Office Hours: Office hours are optional. I will be available during my office hours to answer questions and review for the upcoming exam. Please plan accordingly to attend. I will NOT be lecturing or answering questions related to "What is going to be on the exam". Instead, I will provide explanations to specific topics students ask about during the session.

Academic Integrity: Cheating, suspected cheating, or plagiarism will not be tolerated and at minimum will result AT MINIMUM in a zero on the assignment. It is under the instructors discretion whether to escalate the issue to the Academic Standards Committee. A scholastic integrity report form will be completed and given to administration.

Proctored Online Exams: All exams will be completed online and proctored online by Honorlock. Honorlock has been enabled on all exams. There is no additional fee for Honorlock. The student is responsible for installing the Honorlock web browser extension and ensuring that Honorlock works on their computer. Directions and a practice Honorlock proctored syllabus quiz will be available on the first day of class to ensure that connection to Honorlock is in working condition before the student is to take a major exam.

Cell phones, laptops, smart watches, Bluetooth devices, handheld electronic devices, course materials of any kind, looking around the room, etc. are NOT allowed on the lab exams, lecture exams, or the final exam. It is the student's responsibility to follow proctoring guidelines and to keep their face in the webcam viewing area, keep eyes on the testing computer screen, show blank scratch paper before starting the exam and then show scratch paper again after completing but before submitting the exam, have a quiet testing environment with no other people in the room. I individually review each exam session. If academic dishonesty is suspected, you will be contacted and academic dishonesty policies will be implemented.

ACADEMIC DISHONESTY WILL NOT BE TOLERATED. I will be reviewing each exam recording. Cheating will result at minimum in a zero on the exam and an academic misconduct form will be submitted to Blinn College.

It is the student responsibility to:

- complete a clearly visible workspace scan and 360 degree room scan
- show blank scratch paper during the room scan before the exam begins
- keep your entire face facing the webcam and within the viewing field at all times as well as eyes on the exam computer screen
- no reference to course materials, people or electronics of any kind other than the exam itself. Posting of materials around the room or on the computer screen edge or elsewhere is considered academic dishonesty.
- Honorlock expects the exam session to resemble that of a classroom testing environment. This includes appropriate clothing and quiet.

eCampus: Please log in to eCampus and familiarize yourself with how to navigate the course. View the "Navigating the Course" recording found in the "Start Here" eCampus folder to further understand the course flow, how to access materials, and course expectations. Lecture power points, lecture recordings (via eCampus YuJa), lecture and lab study guides, supplemental videos, practice worksheets and games, practice lab labeling and identification, access to quizzes, homework, and Smartbook bonus, as well as other resources are posted under the "Content" section. You can monitor absences by clicking "Tools, Attendance". You can monitor your grade by clicking "Progress, Grades".

McGraw Hill Connect: Connect is an online learning tool paired with the textbook used in this course. You will access and complete all graded online quizzes, homework, and Smartbook bonus activities from the red and white box entitled "McGraw Hill Connect" located on the course homepage on eCampus. Your eCampus account will be linked to your Connect account once the registration is complete; therefore, a course ID is not required. You may also access each Connect assignment within each Unit folder in eCampus or by accessing the link by scrolling to the bottom of the eCampus course homepage. [Connect Access Options Video Link](https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fvideo.mhhe.com%2Fwatch%2FvjUamLCTLAE2R3GxPkHUUC&data=02%7C01%7CKatherine.Barker%40blinn.edu%7C79f576ab4fd3496d9bc408d7fb302397%7C60448a85d0074d57a583bfec98e99c29%7C1%7C0%7C637254056482547591&sdata=E:pwqKCoghzCDtH3ZZUZjDmP6d8NaRHLifUpEdEzalY%3D&reserved=0)

Visible Bodies: Visible bodies is an online learning tool of no extra cost that helps in lab structure identification. You can also access the software from home by clicking on the following link: [Visible Body Access \(http://kidd.blinn.edu:2048/login?url=http://aandp.visiblebody.com/\)](http://kidd.blinn.edu:2048/login?url=http://aandp.visiblebody.com/)

Labs: We will be using the custom-built interactive Top Hat Lab Manual A&P II for this class.

You can visit the Top Hat Overview (<https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide> (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsuccess.tophat.com%2Fs%2Farticle%2FStudent-Top-Hat-Overview-and-Getting-Started-Guide&data=02%7C01%7CKatherine.Barker%40blinn.edu%7C14509e51ff114e36061708d7f91a8c91%7C60448a85d0074d57a583bfec98e99c29%7C1%7C0%7C637251764746653566&sdata=Dp2vgn%2Bo%2F%2B%2FCxQCrHAVreLTZ9eAgsegXVoMD6BN82Qw%3D&reserved=0>)) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system. Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com (<mailto:support@tophat.com>)), the in-app support button, or by calling 1-888-663-5491.

Grades: Students should refer to the "Gradebook" on eCampus to see the current status in the course. All exam grades will automatically transfer to the eCampus grade book upon completion. Grades from TopHat and McGraw Hill Connect will automatically forward to the eCampus grade book. If multiple assignment attempts are allowed, the highest grade will automatically transfer. If dropped grades are allowed (as in the case of only quizzes and homeworks), eCampus will automatically drop the lowest 2 quiz and the lowest 2 homework scores. Note: You will see "dropped" next to the quiz and homework items in the eCampus grade book regardless of the grade scored on the assignment until more than 2 assignments are complete.

Any concerns about assignment inaccessibility and/or grades must be communicated to the instructor as soon as possible. Any grade concerns or questions must be resolved before the week of finals.

Worksheets: Worksheets are not graded, are not turned in, and are for practice only. In most cases, answers to the worksheets are provided in order for the worksheets to serve as a learning tool.

Disability Services: Every effort is made to provide equal access to students with learning disabilities and functional challenges. Please supply me with your accommodation paper work from the Office of Disability Services (ODS) and I will make appropriate changes in your course work.

The last day to Q drop is Friday, July 30, 2020.

Problem Resolution

If you have a complaint about your class, you should first request a conference with your instructor to try and resolve the problems or issues. If the problems or issues cannot be resolved at the instructor level, you should request a conference with the Assistant Dean:

Michelle McGehee

Phone: 979-209-7378

email: michelle.mcgehee@blinn.edu

Laboratory Safety

Schedule

Day of class	Day of Week	Date	Lecture	Lab	Connect Quiz, Homework, & Bonus	Contact hours
1	Mon.	July 12 th	<p>Watch course introduction video.</p> <p>Read syllabus & complete quiz. Complete introduction discussion post.</p> <p>Ch 26.2 Carbohydrate metabolism: read the textbook & power point slides, view lecture recording, take notes, practice worksheets</p>	<p>Login to TopHat account Complete Lab Safety</p> <p>Complete Lab 1 O₂ Consumption & Metabolism – Due today @ 11:59PM</p>	<p>Ch 26.2, 17, & 25 quiz, homework, & Smartbook bonus</p> <p>Due Friday, July 16th at 11:59PM</p>	4.8
2	Tues.	July 13 th	<p>Ch 17 Endocrine System: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets</p>	<p>Complete Lab 2 Endocrine System in Tophat – Due today @ 11:59PM</p>	No extensions	4.8
3	Wed.	July 14 th	<p>Ch 25 Digestive System: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets</p>	<p>Complete Lab 3 Digestive System in Tophat – Due today @ 11:59PM</p>	2 attempts; highest attempt is transferred to eCampus gradebook	4.8
4	Thurs.	July 15 th	<p>Review for Lecture Exam 1</p>	<p>Review for Lab Exam 1</p>		4.8

5	Fri./Sat.	July 16 th /17 th	LECTURE EXAM 1 (Ch 26.2, 17, 25)	LAB EXAM 1 (Labs 1, 2, 3)		4.8	
6	Mon.	July 19 th	Ch 18 Blood: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Complete Lab 4 in Tophat – Due today @ 11:59PM	Ch 18, 19, & 20 quiz, homework, & Smartbook bonus	4.8	
7	Tues.	July 20 th	Begin Ch 19 Heart: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Complete Labs 5 & 6 in Tophat – Due today @ 11:59PM		4.8	
8	Wed.	July 21 st	Ch 20 Blood Vessels: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Complete Lab 7 in Tophat – Due today @ 11:59PM	Due Friday, July 23 rd at 11:59PM	4.8	
9	Thurs.	July 22 nd	Review for Lecture Exam 2	Complete Lab 8 in Tophat – Due today @ 11:59PM		No extensions	4.8
10	Fri./Sat.	July 23 rd /24 th	LECTURE EXAM 2 (Ch 18, 19, 20)	LAB EXAM 2 (Labs 4, 5, 6, 7, 8)		2 attempts; highest attempt is transferred to eCampus gradebook	4.8

11	Mon.	July 26 th	Ch 21 Lymphatic System: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Complete Lab 9 in Tophat – Due today @ 11:59PM	Ch 21, 22, 23, & 24 quiz, homework, & Smartbook bonus	4.8
12	Tues.	July 27 th	Ch 22 Respiratory System: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Complete Lab 10 in Tophat – Due today @ 11:59PM		4.8
13	Wed.	July 28 th	Finish Ch 22 Respiratory System	Complete Lab 11 in Tophat – Due today @ 11:59PM	Due Friday, July 30 th at 11:59PM	4.8
14	Thurs.	July 29 th	Ch 23 Urinary System: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Complete Lab 12 in Tophat – Due today @ 11:59PM		No extensions
15	Fri.	July 30 th	Ch 24 Water & Electrolyte Balance: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Review for Lab Exam 3	2 attempts; highest attempt is transferred to eCampus gradebook	4.8
			Q Drop Deadline			
16	Sun./Mon.	Aug. 1 st /2 nd	LECTURE EXAM 3 (Ch 21, 22, 23, 24)	LAB EXAM 3 (Labs 9, 10, 11, 12)		4.8

17	Tues.	Aug. 3 rd	Ch 27 Male Reproductive System: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Complete Lab 13 in Tophat – Due today @ 11:59PM	Ch 27, 28, 29 quiz, homework, & Smartbook bonus Due Friday, August 6 th at 11:59PM No extensions 2 attempts; highest attempt is transferred to eCampus gradebook	4.8
18	Wed.	Aug. 4 th	Ch 28 Female Reproductive System: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Complete Lab 14 in Tophat – Due today @ 11:59PM		4.8
19	Thurs.	Aug. 5 th	Ch 29 Development: read the textbook & power point slides, view lecture recording, take notes, complete practice worksheets	Complete Lab 15 in Tophat – Due today @ 11:59PM		4.8
20	Fri./Sat.	Aug. 6 th /7 th	LECTURE EXAM 4 (Ch 27, 28, 29)	LAB EXAM 4 (Labs 13, 14, 15)		4.8
21	Mon.	Aug. 9 th	FINAL EXAM (Cumulative)			4.8
Total Contact Hours						100.8