BIOL 2323.010 (MWF 10-10:50) Human Anatomy-Syllabus
SPRING-2021

Instructor Information
Dr. R. Russell Wilke
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Phone: (325) 486-6638 or 942-2189 (Bio. Dept. Office)
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*Email is my preferred means of contact.
Office Hours: MTW 2-330, TR,9-10 and by mutually convenient appointment

OVERVIEW and LEARNING OUTCOMES:
Welcome to Human Anatomy and your first “mega” syllabus! It is chock full of valuable information, so please
to take the time to read it thoroughly. This is a science course about the study of the structure of cells,
tissues, organs, and organ systems of the human body (see schedule). It serves a variety of academic majors
(6 to be precise) and I will do my best to accommodate special interest topics in each discipline. While the
specifics of content will vary depending on the needs of the participants, we will be aiming at the following
goals to help prepare you for a career in your field.

Please note:
- Biology 2323 - Human Anatomy Lecture is a co-requisite with Biology 2123 - Human Anatomy Lab.
  This means you must enroll in both the lecture and the lab to earn credit for each. In other words,
enrollment is required in both courses. An overall grade will be calculated and assigned to both the
lecture and lab sections.
- Biology 2323 and 2123 are face-to-face courses with strong online components. We will be
  meeting physically on campus AND completing course work and assessments online (see the
  Required Course Materials section of your syllabus for the necessary technology).
- If you are quarantined, please let me know within 48 hours via email so that we may make the
  appropriate accommodations.

A successful student in human anatomy should be able to achieve the following course and state core
related learning outcomes:
- locate, identify, and functionally describe the structures of the human body at all levels of organization
  (i.e. recall content) = CT1, EQS1, EQS2 – Assessment = In class activities, lecture exams, embedded test
  questions, lab practical exams, and lab activities/reports
- determine/visualize the physical relationships of structures to one another at all levels of organization (i.e.
  comprehend the material). CS1 – Assessment = In class activities, lecture exams, embedded test questions,
  lab practical exams, and lab activities/reports
- collect and apply anatomical information to evaluate relevant clinical scenarios/problems (i.e. apply
  information you have learned). EQS1 – Assessment = In class activities, lecture exams, embedded test
  questions, lab practical exams, and lab activities/reports
- work effectively with others to support and accomplish a shared goal = CS1, TW2 – Assessment = In class
  activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports
— connect what she/he is learning to her/his own field (i.e. to make anatomy relevant to your own academic endeavors). Assessment = In class activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports

CLASS FORMAT, PREPARATION, & EXPECTATIONS:
This is a face to face course with a large online component of the course. In other words, we will be meeting physically on campus AND completing a large portion of the course work online (see the Required Course Materials section of your syllabus for the necessary technology). I will expect you to be a self-motivated, self-regulated learner. And I will be your guide on the side to assist you.

I have provided all lecture notes, outlines, handouts, and exam checklists on Blackboard. In lecture I will clarify many, but not all of the concepts you are required to know. Therefore much of you learning (~75%) will occur outside of the formal class meetings. Educational research tells me that learning outside of class is more effective than learning that occurs in class.

To achieve these goals and maximize your learning, it is vital you attend class and come prepared. This means reading the assigned chapters, completing coloring-book plates or other assignments, reading the on-line notes, and completing lab activities in the manual before lab.

Anatomy is not conceptually difficult, but like any science course the amount of material and unfamiliar terminology can make it seem unwieldy. This means it is largely your responsibility to learn the material presented, read the text, and complete the assignments on your own. This requires you to possess a positive attitude toward learning and a serious commitment to studying outside of class everyday, especially within 24 hours of class or lab. It also means participating in activities vital to the concept being taught that day to enhance the teaching of a particular subject. In other words, don’t expect to learn anatomy just by sitting and listening in lecture. While this will enhance your learning, you must take an active role in your own learning by practicing anatomy everyday. As a member of the class you are also:
— expected to attend and be prepared for all lecture and lab meetings.
— expected to take written notes in lecture and lab of material presented.
— required to follow all directions/instructions both written and spoken.
— invited to ask questions (at the proper time of course), no matter how naive they seem to you. There are probably at least two other folks who have the same question. The only stupid question is one that isn’t asked.
— encouraged to ask for help and/or clarification. Don’t suffer in silence. I can’t help you learn if I don’t know you’re confused or if my instructions are unclear.
— encouraged (strongly) to use the Anatomy Study Strategies listed below and our course Blackboard site (see below) which has extensive anatomy resources and study tips. If you are unfamiliar with how to study for a memory intensive course like anatomy, it’s definitely worth your time to take a look.

WHAT YOU NEED TO STUDY:
Simply stated, these are the things you need to work on EVERYDAY. Start by organizing all your materials and making a study plan. Then implement and stick to it. See me if you need help.
For Lecture:
— Top Hat Modules (Required to earn Points)
— Power Point Presentations on Blackboard/Top Hat (For Reference)
– In-Class notes, outlines, & activities (notes, clinical applications, & activities we actually do in class) and on Blackboard
– Coloring Book Plates (see your lecture syllabus schedule for which ones you need to know)
– Exam Checklists on Blackboard

For Lab:
– Lab Summary Word Lists on Blackboard
– Lab Images on Blackboard
– Open Lab

REQUIRED COURSE MATERIALS:

• Required – Masks at all times.
• Required - Wi-Fi and broadband internet with access to a desktop or laptop computer with Google Chrome Browser, Word, and Power Point. Note some Chromebooks may not be compatible with course technology.
• Required – Access to a smartphone or tablet.
• Required - ASU email account that you check DAILY. Call the ASU IT Dept if you need one or have forgotten how to access it (325-942-2911)
• Required - access to https://blackboard.angelo.com. Many course materials for lab are located here.
• Required - Top Hat Response System ~$75.00 – Mobile/Electronic device driven platform we will use for attendance, quizzes, readings, AND homework activities. It also incorporates the required textbook Human Anatomy by Jenny, Lindsey, & Geske, Nicole (Eds.). (2018). Human Anatomy. Toronto, ON: Top Hat Monocle. https://app.tophat.com/register/. There is also an app for both android and apple based smart phones and tablets, so you can take anatomy anywhere! It also works well with and without Wi-Fi although Wi-Fi is strongly recommended.
  ○ NOTE: The JOIN CODE is 403506. You will also receive an email to join the class through Top Hat Monocle.
• Required- Non-sterile surgical gloves. (You will need these the first day of lab)
• Optional - Colored pens, pencils, or markers are helpful for your coloring book assignments and taking notes.
• Optional - Standard Human Anatomy Dissection Kit

INTERNET ACCESS IS REQUIRED for this course. Lecture and lab materials will be distributed routinely via the internet on Blackboard. In addition to many lecture and lab resources, there are many study tips and strategies that you may find useful in your studies. You may access the web free at any computer lab on campus and from home. For more information call the Informational technology department at 942-2911.
– You are required to have a Blackboard account and an official ASU email address. I will use these to make announcements, distribute materials (lecture notes, outlines, handouts, and exam checklists) and post grades. You can access Blackboard1 24/7. Please visit the site regularly. If you have not used Blackboard before, you may wish to review the tutorial by selecting “the help” icon or call the ASU Technology Service Center at 942-2911 (MCS-111) for assistance.

Communication:
Class announcements will be routinely distributed via email; this means you will need to check your ASU email account DAILY. This is NOT optional. Please be aware that all official course correspondence will be through
your ASU assigned email address only. Contact the IT dept if you need one assigned (942-2911). I will respond to email messages within 24 hours during working hours Monday through Friday. Weekend and late Friday afternoon messages may not be returned until Monday.

GRADE DETERMINATION:
Your grade will be based on the total point accumulation (not percentages) you earn on assignments and exams in both lecture and lab. Your overall grade will be determined by the number of points you earn on lecture exams, lecture activities, quizzes, and Lab Practical exams. Your lab grade is combined with your lecture grade to determine your overall grade in the course. At the end of the semester all points (lecture and lab) are added together. Because the lab is required and a co-requisite of the course, your final grade in lab will be the same as your overall grade in the course. The total number of available points in the class is 1150. Final grades are assigned according to the following scale:

<table>
<thead>
<tr>
<th>Course Component</th>
<th>Maximum Points Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Laboratory Practical Exams, Assignments, and Quizzes</td>
<td>535 points</td>
</tr>
<tr>
<td>Lecture Exam 1</td>
<td>125 points</td>
</tr>
<tr>
<td>Lecture Exam 2</td>
<td>125 points</td>
</tr>
<tr>
<td>Lecture Exam 3</td>
<td>125 points</td>
</tr>
<tr>
<td>Lecture Exam 4</td>
<td>125 points</td>
</tr>
<tr>
<td>Lecture Activities, Top Hat Quizzes and Assignments</td>
<td>125 points max</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1160 points available</td>
</tr>
</tbody>
</table>

Grading Scale
A = 900 or more points
B = 800-899 points
C = 700-799 points
D = 600-699 points
F = 599 or less

Various Point Values – Serve as a built-in curve equal to a ~ 1.16 letter grade.

Please note I do not curve exams or final grades nor are they negotiable (i.e. an 899.9 pts = B; 599.9 pts = F, etc). Grades will be changed only if you can demonstrate (with verifiable evidence) that there was an error in how the grade was calculated or an incorrect grade was entered, but once the graded is posted on Black board you have only 48 hours to challenge it. (At the end of the semester is too late). See ‘regarding procedures’ below for a more complete explanation of how to do this. All students will be treated equally and fairly, and all grades will be calculated in the same way, regardless of extenuating circumstances or any reason not related to your actual performance in the course. However much I may sympathize with your personal circumstances, I never consider them to be a basis for grade assignments. The activity points serve as an extremely generous, built-in curve. I strongly encourage you to take advantage of the activity points when they become available because once assigned, they cannot be made up. Therefore, you should always attend class and strive to do your best, so that you may earn the grade you want. It is your responsibility to keep up with your point total. Don’t worry I will help if you just ask!
ASSESSMENT MEASURES:

Class Participation Activities & Homework (125 points):
- The volume of material covered in this course makes it necessary for you to dedicate a sufficient amount of time each day, not only to attending class but to studying material outside of class.
- To encourage you to keep up with this material and to provide a means of self-assessment quizzes, activities, and other assignments will be made periodically during the semester via Top Hat and Blackboard. Participation in ALL of these activities is expected and required.
- In the lecture portion of the course, 150 points for lecture activities and homework will be offered, although only 125 points max will be used in calculating your grade. I use this as a way for students to accumulate points even if they have to miss a class or an assignments. This means that while you cannot make up the individual assignment, you can make up the points. Think of it as insurance.
- It also means I do not accept late work. Use every opportunity early and throughout the semester to complete these activities to be sure that you will have the maximum points (100) by the end of the semester.
- The maximum number of points you can earn in this category is 100. This is roughly equivalent to 1 lecture exam.
- No last-minute offers of extra-credit are made in this course, so please don't ask. It wouldn't be fair to your classmates that have done all the work to earn their grade. Pay your premiums - use opportunities early in the semester so that you can earn the grade you want.
- Also, please note that Blackboard is merely a repository for grades and cannot calculate them. For example, the maximum number of points you can earn in this category is 100, even though you may have more showing in your total.

Lecture Exams (500 points):
In lecture your performance will be assessed by 4 lecture exams (see schedule) worth 125 points each for a total of 500 points in lecture. You are required to take all 4 exams, no exceptions.
- Lecture exams will assess your knowledge, comprehension, and application of the material presented in lecture, Top Hat Assignments and other in-class assignments made since the previous exam (~60%).
- A portion of your exams will also cover assigned plates, from the Anatomy Coloring Book 4th ed., (~20%) that you should be able to label and/or identify (i.e. figures you have been assigned for study will be selected and used on each exam). See schedule for specific plate assignments.
- The exams will also assess your application of the content in the form of problems that will be assigned in advance from your Exam Checklists and/or text (~20%).
- The format of all the exams will be multiple-choice. Tentative exam dates are given in the schedule. Exams are designed to be completed in a 55 (MWF) or 75 (TR) minute time frame depending on your specific class.
- Student conferences are required for any freshman who fails any exam, quiz, or assignment or who has a combined lecture/lab grade of less than 60%. Upperclassman may also be invited to meet with me at their discretion.

Exam Days:
- Exams will be given on Top Hat on the days scheduled in the syllabus.
- The exam will be available for a 80 minute (1 hour and 20 minutes) period of time, beginning and ending during your regularly scheduled lecture day and time on the dates provided (See section titled “Exam Dates” below).
You are allowed to use your materials on the exam, but you will not have time to “look up” every answer. You will need to study in advance just like you would for an in-person exam in the classroom.

Exams will require a passcode, which I will email you in advance. You will use the code to access the exam.

Top Hat also uses several "exam proctoring" features to ensure academic integrity...in other words...to keep you from cheating. For example, if you leave the exam for more than 5 seconds or open another screen/window more than 5 times or take a screenshot, it will automatically lock you out of the exam.

I will be monitoring the exam remotely, so email me if you are experiencing connection problems.

For the exam, you are required to use a desktop or laptop computer. (Tablets, Cell Phones, and Chromebooks may not work). If you are using a computer/laptop/tablet, you are required to use Google Chrome or Mozilla Firefox (and connect to Wi-Fi obviously)

Also, if an image or question doesn’t display correctly, try refreshing the screen a couple of times. That fixes most issues.

Those students with documented special accommodations must meet with me at least 3 days prior to the exam in order to make arrangements. Failure to follow these instructions may not have accommodations available.

Laboratory Practical Exams (535 points):
Your lab performance will be assessed with by five practical exams and other lab activities. These will be discussed in more detail by your lab instructor and posted in your lab syllabus.

Make-Up Exams:
1. Lecture make-up exams will not be provided. You will be able to make up the points, but not the actual exam due to exam security and equity issues to other students.
2. If you miss an exam 1, 2, or 3 for any reason, your score on exam 4 will be used to replace the missed exam.
3. Those students who have taken exams 1, 2, and 3 will have the opportunity to replace their lowest exam score with their exam 4 score. You may replace only one exam score. Missing two or more exams may results in failure of the course.
4. Every student must take the final exam (exam 4).
5. You may take an exam early once, IF you have a university recognized verifiable excuse and notify me at least a week in advance, I have it prepared in time, and take it at a time convenient for me. (You must meet all of these). Work, doctor’s appointments, and vacation trips, etc are not university recognized excuses.

Re-grading Procedures:
An answer "key copy" of each lecture exam will be made available after it has been graded and returned. You are encouraged to review the "key copy" to learn from your mistakes. You are also encouraged to confer with me via the outlined procedure below if you have concerns regarding your quiz or exam once you have compared your work to the key. To report calculation or grading errors on your exam, you are required to follow the Procedures for Re-grading shown below. Activity quizzes and assignments are not subject to re-grading, but math errors only.

1. If the error is strictly a mathematical error:
   - staple a note to your /exam which reads “math only” & turn it in to your instructor for a grade recalculation.
2. If you believe you have found a grading error:
   - remember that a 1 pt error is at best only .0025 pts on your final course average.
   - remember the exams are photocopied immediately after you turn them in (e.g. I will know if you have changed an answer). It is an expense I wish I did not feel compelled to bear.
   - study the key before you request that any question(s) be re-graded. You must clearly state your reason(s) for thinking the question has been graded incorrectly in a neatly written, attached note. “Question X is graded wrong or I deserve more points on question Y” are not reasons. This means I expect a clearly delineated/thoughtful reason based on verifiable factual information that your answer is correct (i.e. from a reputable source like your text or lab manual). This means I expect a short paragraph for each error along with specific page references.
3. Staple your justification to your exam and turn it in to me. Understand I will be very fair and accurate, but the entire exam will be re-graded AND if the resulting grade is lower than the previous, the second grade will replace the first.
4. The deadline for requesting any recalculating or re-grading is 48 hours following the posting of the grade on Black board...No Exceptions.

**ATTENDANCE POLICY:**
**Attendance will affect your grade in the course.** You are required to be in class every day and are responsible for all information given. ASU requires that attendance be checked at each class meeting. TopHat will be used to take attendance daily. You must stay for the entire lecture to get credit for attendance. Other means of taking attendance will also be used to cross reference the roll sheet. I do not give points for perfect attendance nor do I subtract points for excessive absences. Attendance will affect your grade in this course however. You penalize yourself on exams when you miss class simply because you are missing learning opportunities. For example, activity opportunities given in-class cannot be made up. Plus on average, students who miss a single lecture class score 6-8% lower than the class average on exam scores. This decreases about another 6-8% for missing two classes. Missing more than two lecture classes virtually guarantees a very poor exam score. In general it is true that students who exhibit erratic attendance do not perform to their full potential and may be perceived as having a lack of interest in completing the course. If a situation exists which is causing you to miss an excessively, I encourage you to discuss the situation with me. Excessive absences are required by the university to be reported to the Registrar’s Office, the Dean of Student Life and/or the department head of your declared major. If you are an athlete, the NCAA compliance officer and your coach will be contacted. Contrary to popular belief, a student who fails to attend class is not automatically withdrawn from a course and will receive a grade that represents their performance throughout the entire semester.

**HOW SHOULD I STUDY?**
Because everyone learns in different ways, there are lots of ways to learn the material. Anatomy is mostly about learning and recalling information with some problem solving thrown in for good measure. This is how I would suggest that you approach the course.

1. Start with attending lecture and taking good notes. Good note-taking is the corner stone of any course. Re-write and Recall lecture notes within 24 hours of class. All lectures will be recorded and posted on Bb too. For further study, you can also watch the short YouTube videos I have posted on Bb.
2. Next, complete the Top Hat reading assignments and accompanying quizzes.
3. After reading through a Module on Top Hat, reference the Coloring Book Plates for a visual representation. Learn the terms mentioned on Top Hat that are visible on the plate.
4. After reading through the Module and reviewing the corresponding Coloring Book Plates, answer the Exam Checklist Questions. These will not be graded but will appear on the exam. Use the Student Learning Objectives (Lecture Outlines) and Selected PowerPoint Presentations on Bb for reference to assist you.
5. Complete any assignments on Blackboard (Bb).
6. Now comes the fun. You will need to commit to memory the items on Top Hat, Coloring book Plates, and Checklist Questions to memory. There are lots of different ways to do this, and I will help.
7. Every 2-3 days, I will update you on all assignments and due dates.

REQUIRED USE OF MASKS/FACIAL COVERINGS BY STUDENTS
As a member of the Texas Tech University System, Angelo State University has adopted the mandatory Facial Covering Policy to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy, students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

ANGELO STATE UNIVERSITY – ACADEMIC INTEGRITY & HONOR CODE:
ASU expects its students to maintain complete honesty and integrity in all work. Students are responsible for understanding and following the Academic Honor Code as outlined on the university’s website and in the Student Handbook. Any student found guilty of any form of dishonesty in academic work is subject to disciplinary action and possible expulsion from ASU. The College of Science and Engineering adheres to the university’s Statement of Academic Integrity. [https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php](https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php)

WITHDRAWAL FROM THE COURSE:
Contrary to what many students believe, you are not automatically withdrawn from a course if you cease to attend lectures or labs. If you wish to discontinue participation human anatomy you must formally withdraw by seeing your lecture instructor first. Failure to do this can result in a grade of F appearing on your academic transcript. The last day to drop the course is Friday, April 30th. You must complete and submit the on-line form to do so. Here is the link [https://www.angelo.edu/content/forms/290-course-drop-request-form](https://www.angelo.edu/content/forms/290-course-drop-request-form)

SPECIAL NEEDS/DISABILITY STATEMENT:
ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or
activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website.4 The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
dallas.swafford@angelo.edu  
Houston Harte University Center, Room 112

If you believe your success in the course is at risk due to a disability, it is your responsibility to arrange a meeting with me by the end of the second week of class, so that we may further assess your situation. I will work with you to provide reasonable accommodations so that you have a fair opportunity to perform successfully in this class, but only if you take responsibility. (Right before a quiz, practical, or exam IS not taking responsibility. You must meet with me well in advance, so that I may help you.

RELIGIOUS HOLY DAY:
A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence AND the first week of classes. Any make-up assignments will be need to be completed and turned in in advance. If an exam is missed, see Make-Up exams above. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

TITLE IX AT ANGELO STATE:
Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. Sex discrimination, sexual misconduct, public indecency, interpersonal violence, sexual assault, sexual exploitation, sexual harassment, and stalking are not tolerated at ASU. As a faculty member, I am a Responsible Employee meaning that I will report any allegations I am notified of to the Office of Title IX Compliance in order to connect students with resources and options in addressing the allegations reported. You are encouraged to report any incidents to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator. You may do so by contacting:

Michelle Boone, J.D.  
Director of Title IX Compliance/Title IX Coordinator  
Mayer Administration Building, Room 200 325-942-2022
You may also file a report online 24/7 at [www.angelo.edu/incident-form](http://www.angelo.edu/incident-form). If you wish to speak to someone about an incident in confidence, you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345. The Office of Title IX Compliance also provides accommodations related to pregnancy (such as communicating with your professors regarding medically necessary absences, modifications required because of pregnancy, etc.). If you are pregnant and need assistance or accommodations, please contact the Office of Title IX Compliance utilizing the information above. For more information about Title IX, in general, you may visit [www.angelo.edu/title-ix](http://www.angelo.edu/title-ix).

**ELECTRONIC DEVICES**

Devices such as cell phones, tablets, etc. are allowed to operate during formal lecture as long as they do not distract me or others around you. Some exams and quizzes will require an electronic device, while on others they will not be allowed. If they are a distraction or disruptive to me or fellow students or used when they are not allowed, points will be deducted from your point total for each time they ring/chime/etc...or you talk on them during class, after an initial warning. If the disruptive behavior continues, you will be reported to the Dean of Student Life and your department head. If you would like to use recording devices such as laptops/tape recorders during lecture only, please ask.

**STUDY TIPS**

Tips specifically designed for a memory intensive course like anatomy are available on Blackboard. If you are unfamiliar with how to study for a course like anatomy or how to manage your time effectively, it is well worth your time to take a look. This is especially important if you are a true freshman or have never taken a science course at ASU before. If this description fits you, please make an appointment with me as soon as possible so we may discuss a study work-out plan for you.

**Supplemental Instruction is available for this course.** SI sessions are student led, group study focused on helping you learn to be successful in human anatomy. Sessions are regularly scheduled, hour-long meetings wherein you will be able to participate in group discussion about the lecture and assigned readings. SI sessions cover the following:

- Key course concepts and how to identify important material
- Clarification of lectures and text; Efficient organization of course material
- Development of possible test questions and taking mock exams
- Problem-solving techniques and Critical thinking skills
- Study skills strategies (e.g., understanding lectures, effective note-taking, textbook reading, etc.)
- They will not help you complete homework/activity assignments.

The cost is absolutely FREE to students enrolled at ASU. SI leaders are former Anatomy students who performed exceptionally well in the course. SI Leaders are trained to lead small group discussions and assist you with problematic course concepts. Preliminary results indicate students who attended SI earned on
average earn one to one and a half letters grade higher on lecture exams than students who do not attend. More information will be provided later.

A SPECIAL NOTE:
We are excited you decided to travel with us this semester on a fascinating journey through the human body. Anatomy is the ABC’s of biology. It is fundamental and absolutely essential in understanding biology and an integral part of many other disciplines such as physiology, medicine, athletics, natural history, psychology, nursing, and other allied health sciences. Since Anatomy is a taught in an academic setting, it requires a great deal of conceptual understanding and rote memorization...and although most of anatomy is straight forward, the amount of material and unfamiliar terms make it a seemingly difficult subject. You absolutely must prepare for class and study nearly every day to earn the grade you want. This requires you to PDA... practice (the content), be disciplined (to study), and possess a positive attitude (about the course). Any deficiency in these learning characteristics may affect your ability to learn and thus the grade you earn in the course. Let me put it this way. Some students who have never had a “real” science class before employ the same study strategies they have used in other classes only to find they are a dismal failure. For example, some students find that studying 30 minutes to an hour (or even not at all) before an exam in their major can easily earn a “C’s” (or even B’s) with no problem. That same strategy used in anatomy virtually guarantees you will be unsuccessful. You must therefore change your study habits to accommodate this science course. Anatomy requires you to be disciplined to study EVERY DAY! Therefore it is VITAL that you keep up with your studies starting from DAY 1. Students who get behind often have difficulty catching up because of the ferocity of the schedule and the amount of material covered on each exam. Don’t worry, many students are extremely successful in this course. The key to success often starts with budgeting your time carefully and making lots of room for anatomy in your schedule...again...we recommend 2-3 hours/day OUTSIDE of class. Successful students in the past have told us that’s just about right. Like learning a foreign language, some students prefer the total immersion in the material which may help you as well. I can show you how to maximize your study time, so please don’t hesitate to ask me. I’m here to help you learn 😊! Yes, I do care about your success. Yes, I’m here to help! Yes, You can do it! See the study tips on Blackboard for more information. I know that anatomy can seem overwhelming at times, but it really can be easy IF you are just willing to put time and effort into the course. It will take intense dedication on your part, but I will do everything I can to help you achieve your learning goals.

If you are unfamiliar with or unaccustomed to studying for a memory intensive, science-based course like human anatomy please review the study tips on Blackboard for useful information that has helped students just like you! Read on for more information.

WHAT YOU NEED TO DO TO EARN AN A (OR THE GRADE YOU WANT):
The fact that you’re reading this shows that you have the potential to be an “A” student. In fact, I would like for every student in this class to earn an A. Read that again....Shocking isn’t it? Yes, believe it or not I want you to do well and if you’re reading this, I sincerely believe you have the potential to do so in this class. I will do everything in my power to help YOU EARN the grade you want, but you’ll have to do your part too which means studying for complete understanding everyday, attending class and lab, and learning beyond just memorizing the facts.

Anatomy is conceptually easy to understand, but learning it will require much effort on your part. Many students after an exam say, “but I knew the material,” or “I even studied for 8 hours,” and are truly bewildered by a grade lower than they anticipated. The problem is that there’s a big difference between understanding something you hear and/or read and knowing it. Understanding is what has to come first, but knowing is
beyond even that. Knowing requires being able, without reference, to (1) repeat what you hear/read, accurately and completely, AND (2) use what you’ve heard/read to figure out things you’ve never seen before at all! In other words using what you know. Don’t let time dictate your studying; let learning. Study until you “learn” the material, no matter how much time it takes.

Also consider that knowing requires a degree of familiarity and usefulness of the material that cannot occur overnight. Cramming doesn’t work. I suggest you spend “quality time” with anatomy everyday. Also don’t be deceived by the large amounts of free time in your schedule. They simply do not exist. The general rule of 3 hrs of outside study a week for each hour of course credit is no joke. Such experiences have led to the classification of a person carrying 12 semester hours as a full-time student in many colleges and universities including ASU.

Here are some examples:
• 3 hours of outside study/hr of class x (12 class hours) = a 36 hour work week outside class + 12 hours in class = a 48 hour week (i.e., College is a full time job!).
• Or to put it differently 75% of what you accomplish is done on your own. This may be vastly different from your experience in high school or other courses. Please believe me when I tell that studying for just 30 minutes before an exam or practical will not work in this course. You therefore must accept responsibility for much of your own learning.
• This means for anatomy, you need to study 12 hours a week! Read that again…Yep, that’s what it takes.
• If you have a part time job, you are just doubling your work week. Time management is critical. To study 12 hours a week we suggest getting a calendar, marking all your exam dates on it, and preparing a weekly schedule of study/play/work time.

So how do you become an “A” student?
Well it really is simple isn’t it? You must come to class and you must study...for learning. Seems easy enough to say, but is often more difficult to put into practice. The feeling of being lost or overwhelmed by the material is not uncommon. Neither are the feelings of uneasiness and frustration. A positive attitude is difficult to maintain when frustration rears up. But I am here to help you achieve those goals. Okay, okay So what’s the real way…the bottom line…the trade secret? Well to put it frankly, THE most important strategies you can do to ensure the grade you want are (1) REVIEW your lecture notes and lab material DAILY (2) KEEP UP with the coloring book plates and checklist questions, AND (3) POSSESS a proper ATTITUDE about learning. I’m not kidding...they are all that important to success in anatomy. Successful students tell me so and I have seen it time and time again. So please don’t be like Calvin in these cartoons 😊 He has a poor attitude. If you are unfamiliar with how to study for a science course, please see me for help or use the study tips posted on Blackboard. Here are just some more tips from those who have traveled this path before you.

STUDY STRATEGIES OF A and B STUDENTS in HUMAN ANATOMY
Based on the experiences of successful anatomy students of the past, we have prepared this handout to assist you in your studies. Listed below are the top study strategies of A and B students consistently reported to us in surveys. Please note Calvin’s is first 😊!

1. **Take good notes during class and reread, review, and revise them every day.** Research shows if actually write notes and read your them for 15-20 minutes a day, you will absolutely do better on your exam than if you didn't. Why? because you won't have to cram in the end. You will already be familiar with your notes. In addition, you will have discovered early on what you do not understand and can get help well before the exam. *This is by far the most common strategy used by A and B students.* Repetition simply works!

2. **Recopy/Reorganize your notes** - Some folks simply recopy their notes after lecture. Others will reorganize them and incorporate information from their text to supplement those taken in lecture. Still others take notes using the 3-column method. One large central column is used for notes. Two smaller peripheral columns are used for the actual reorganization. One column is used for generating questions, ideas, and comments, the other for the actual reorganization of the notes. People tell me it works. The idea is to spend as much time as possible with the material and to get help with concepts you do not understand early.

3. **Study the coloring book plates and lecture notes at the same time.** This is an excellent way for you visual learners to maximize your study time. The coloring book structures most often asked on exams are the ones covered in the lecture notes. So while your study the “liver” in your lecture notes, have the coloring book plate open to the “liver” to visualize the textual material you’re reading. You’ll automatically be studying for both portions of your lecture exam. Also since many coloring book plates are duplicated between lab and lecture, you’ll also find you’ll be able to “double dip.” Those plates you are required to know for lab are also the same plates you have to know for lecture. If you learn it well the first time, it will only take a brief review later. This can help you maximize the number of points you are able to receive on both lecture and lab.

4. **Form study groups and go over material together.** If used properly, this is a great way to study. Schedule weekly meetings with your group to “go over the notes.” You can see if everyone else got the same thing out of lecture as you did. If things are not clear, you can make a list of questions and ask your instructor for clarification. Likewise in lab having a consistent study partner quiz you can help you know early on whether you are retaining the material.

5. **Develop the habit of asking questions to yourself and to your study group.** For example, "What would be a good test question from this material? What don't I understand about this? What is/are the main idea(s)/process(es)/application(s) of this topic? Why and When do they happen? etc." You'll find that you will begin to anticipate the actual test questions! Good students always ask questions. This shows they are enveloping themselves in the culture of the course and constantly reviewing the material in their minds so that it makes since. Psychology tells us this is how most people learn...by asking questions.

6. **Manage your time efficiently** and prioritize/schedule your days to include school, work, family, fun, friends, health, and exercise. Calendars are wonderful things and no college student should be without one. We recommend writing down exam dates, etc., from all your courses so you’ll always know what’s coming. In addition its also helpful to write down your work schedule and or any other important dates. A and B students know how to prioritize and most tell us they do study 10-15 hours a week for anatomy alone. They break the material down into manageable chunks (i.e. a little everyday) and don’t ever procrastinate.

7. **Attend lecture and lab.** Some of the topics and specific examples we will use you will not be able to get unless you come to class or discussion. Attendance and participation are vital to your success in
this course. Our statistics tell us that A and B students almost never miss class or lab. Those students who miss just one class or lab score on average 6-8% lower than the class average on exams or practicals.

8. **Make a vocabulary sheet/or flashcards and keep them with you at all times.** Yes this is just what you did in high school, but it works. Lots of students find that this helps them learn the vocabulary quickly and easily. You can pull them out anywhere and review. You'll be surprised what you can learn waiting in line for 10 minutes. Remember you will learn as many new words this semester as you would in a beginning foreign language course (about 3500 or so).

9. **Internalize New Words.** To internalize (learn) a new word, to make it truly part of your vocabulary, you must use the word and use it often. Write it and speak it at every opportunity. Make opportunities to do so. Yes, I just said this, but it is worth saying again. Don’t just stare at the diagrams and illustrations in your references; draw on your own...and label them! Test your comprehension and retention by discussing the material. Study in a group. Set up weekly meetings to “go over the notes.” But don’t permit anyone at any time to substitute words like “thingy,” “stuff,” “doodad,” or “dealie” for the proper words required. You’ll defeat the whole purpose of discussion if you do.

10. **Read your text and lab manual before (or after) class.** Reading can help solidify your understanding of the material and help you retain information. For example, if you’ve read material ahead of time and then hear it in lecture, you’ve just helped your brain make an association between the two sources of information. Conversely if you read your text after lecture and remember me lecturing about it, you’ve just made another connection. Psychologists tell us that’s the first step toward learning...making associations. Ask me about successful and efficient ways or reading your textbook assignments.

11. **Take advantage of lab time/extra lab time.** The lab portion of this course is vital to you success. Lab is scheduled for 3 hrs/week that may not be enough for you. You need ALL of that time and more if its available...read that again. You need to always come prepared to work and stay the full 3 hours. A and B students often read ahead to get a jump on things and frequent open lab every chance they get. Anatomy lab requires a high level of comprehension and familiarity that only come with hands on experience and lots o' practice. It still amazes us when people goof off in lab or consistently leave early and then come crying to us when they perform poorly on the practicals. To do well in this course you need to take advantage of lab time. A & B students do. We simply can't help you if you're wasting time/leaving early/or not attending lab.

12. **Same as number 1. This should tell you how important it really is.** The single most important study strategy you can implement in human anatomy is reviewing and recalling your lecture and lab material everyday, especially within 24 hours of each lecture class and lab. The figure below shows what happens if you review and recall your notes within 24 hours or not. For those students who review and recall their lecture and lab notes everyday within 24 hours, one can almost guarantee success in recalling material even after 63 days. There is such a drop in retention of material if you wait 24 hours to review that it becomes very difficult to master the course with the amount of material we have. This is especially true if you try to cram all the material in the night (or even several days) before a lecture exam or lab practical. Why does reviewing and recalling your notes and lab material within 24 hours of class work? Basically there are two causal explanations. One is that you won’t have to cram. You will already be intimately familiar with your notes when the exam arrives. In addition, you will have discovered early on what you do not understand and can get help well before the exam. Again this is by far the most common strategy used by A and B students. REPETITION works...and...it won't get done by itself. It takes EFFORT and of course what Calvin is selling.
<table>
<thead>
<tr>
<th>DATE (Approximate Week of)</th>
<th>Biology 2323 Tentative Schedule TOPICS in Approximate order on Top HAT</th>
<th>Top Hat Module Assignments</th>
<th>COLORING BOOK (CB) PLATES 4th Edition of Kapit &amp; Nelson</th>
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<tbody>
<tr>
<td>Jan 25-Feb 12th</td>
<td>Body Organization &amp; Cavities, Organ Systems, Cell Structure &amp; Division</td>
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<td>1-7</td>
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<tr>
<td>Jan 25-Feb 12th</td>
<td>Tissues &amp; Integumentary System</td>
<td>3-4</td>
<td>8-11, 13, 15, 16</td>
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<td>Feb 15th-Mar 5th</td>
<td>Skeletal System Organization, Bone Tissue, &amp; Articulations (Joints)</td>
<td>5 &amp; 8 only</td>
<td>17, 18, 19 (bone names), 20-21, 39, 41, 42</td>
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<tr>
<td>Feb 15th-Mar 5th</td>
<td>Muscle System Organization, Groups, Microanatomy &amp; Levers</td>
<td>9 only</td>
<td>11-12, 71, 42-43</td>
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<td>Mar 8th-Mar 31st</td>
<td>Endocrine System Overview</td>
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<td>Mar 8th-Mar 31st</td>
<td>Fundamental of the Nervous System &amp; Nervous Tissue</td>
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<td>Mar 8th-Mar 31st</td>
<td>Peripheral Nervous System &amp; Pathways</td>
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<td>Mar 8th-Mar 31st</td>
<td>Autonomic Nervous System and Visceral Sensory Neurons</td>
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<td>Mar 8th-Mar 31st</td>
<td>Special Senses: Visual, Gustatory, Auditory, Olfactory</td>
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<td>94-97, 99-100</td>
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<td>Apr 5th-May 7th</td>
<td>Digestive System</td>
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<td>134-136, 138-143</td>
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<td>Apr 5th-May 7th</td>
<td>Respiratory System</td>
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<td>127-132</td>
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<td>Apr 5th-May 7th</td>
<td>Blood and Blood Vessels</td>
<td>21</td>
<td>100-102</td>
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<td>Apr 5th-May 7th</td>
<td>The Heart</td>
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<td>103-106, 114-119</td>
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<td>Apr 5th-May 7th</td>
<td>Lymphatic and Immune Systems</td>
<td>20</td>
<td>120, 121, 123-126</td>
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<td>Apr 5th-May 7th</td>
<td>Renal/Urinary System</td>
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<td>3-7 May</td>
<td>Reproductive System</td>
<td>26</td>
<td>155-158, 160, 162</td>
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Exam 1 = Exam 1 = 125 points (Covers Top Hat Modules 1-4, Exam #1 Checklist Questions, and CB Plates)

Exam 2 = Exam 2 = 125 points (Covers Top Hat Modules 5, 8, and 9, Exam #2 Checklist Questions, and CB Plates)

Exam 3 = Exam 3 = 125 points (Covers Top Hat Modules 13-19, Exam #3 Checklist Questions, and CB Plates)

Exam 4 = Exam 4 = 125 points (Covers Top Hat Modules 20-26, Exam #4 Checklist Questions, and CB Plates)

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Student Agreement Sheet-Human Anatomy

I, __________________________________, (print your name) have read the information contained in the biology 2323 Human Anatomy Lecture syllabus for the **SPRING 2021 semester** at Angelo State University and fully understand the expectations and requirements for completing this lab successfully. In addition, I pledge to maintain the highest standards of academic honesty, integrity, and discipline while I am enrolled in this course. (Turn this sheet in to your instructor).

**LECTURE** section (day & time) __________________________.
**LECTURE** Instructor’s Name ____________________________.

**LAB** section (day & time) ____________________________.
**LAB** Instructor’s Name ____________________________.

Academic Major ________________________________________.
Career Field ____________________________________________.
Academic Classification ________________________________.

ASU ID # ____________________________________________.

I acknowledge I have received, understand, and am responsible for the material contained in the syllabus.

**SIGNATURE:** _________________________________________ DATE: ____________________.

*Answer the following questions:*

1. **Why are you here?**

2. **What are you most proud of and why?**

3. **What do you want to do with your life?**