

## BIOH480 (honors): Teaching Anatomy and Physiology I Syllabus Fall 2017

**Instructor: Laurie Minns, PhD**

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- Phone: 406-243-6013
- Office Hours: Mondays 9:10-10:45am and by appointment
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**\*\* Pre-requisite: Grade of B- or higher in BIOH365, consent of instructor**

### Course Meeting Times:

- Fridays 7am-7:50am
- Mondays 5pm-7pm: rotation check off
- Assigned lab (arrive 10 minutes early)
- Assigned open labs (stay the entire 2 hours or 2 blocks of 1 hour, TBD at the beginning of the semester)
- TA only open labs (optional for content mastery, see lab schedule)

### Course Structure

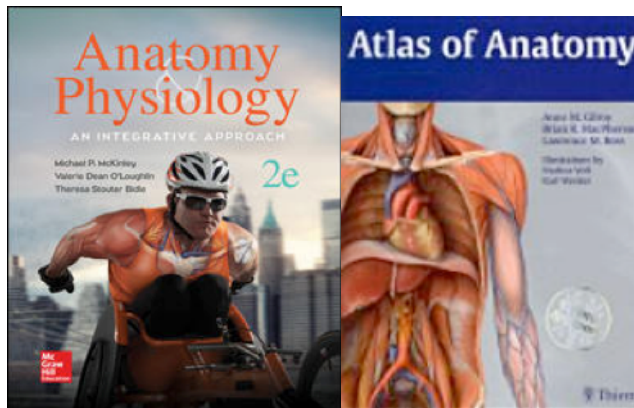
- 1) Lecture, discussion and preparation of laboratory materials for BIOH365.
- 2) Weekly mandatory meetings to discussing teaching strategies effective for undergraduate BIOH365 cadaver labs
- 3) Supervised teaching of laboratory activities in one BIOH365 laboratory per week
- 4) Supervised teaching during weekly open labs for BIOH365 students.

### Required materials:

Required Course Materials:

Anatomy and Physiology, an Integrative Approach, 2ed. McKinley, O'Loughlin, Bidle. McGraw Hill, 2016. ISBN 978-0-07-802428-3. McGraw Hill Connect online supplement. Copies of this book are available to check out of the lab. Peer Leaders will be provided with a shared access code to gain access to the electronic materials for the course.

<http://connect.mheducation.com/class/minnsbioh365lecture>



Atlas of Anatomy by Anne M. Gilroy, Brian R. MacPherson, Lawrence M. Ross - Thieme (2008)  
–ISBN-978-1-60404-062-1 or the 2<sup>nd</sup> or 3<sup>rd</sup> edition of the Gilroy atlas or the electronic edition  
(available from [www.thieme.com](http://www.thieme.com))

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## Course Objectives:

Upon successful completion of this two-course sequence, you will have mastered the conceptual and practical information regarding the anatomy and physiology of the human organism by assisting in teaching the human anatomy and physiology labs (BIOH365). More specifically, upon the successful completion of this course you should be able to:

- 1) Demonstrate understanding of chemical and biological principles and knowledge that serve as the foundation for understanding human anatomy and physiology.
- 2) Understand and analyze cellular processes governing development, growth and normal function of the human body.
- 3) Understand the processes involved with maintaining homeostasis and anticipate what may occur when homeostatic balance mechanisms are lost.
- 4) Demonstrate practical knowledge of human gross and microscopic anatomy using human cadavers and prepared histological slides.
- 5) Identify structures in the body and analyze their relationship with other structures.
- 6) Describe development, regeneration and normal function of body systems
- 7) Understand the cellular and physiological mechanisms that drive tissue formation and function.
- 8) Employ the scientific process for understanding principles of anatomy and physiology.
- 9) Analyze A&P observations and data and determine the potential physiological consequences.
- 10) Become familiar with current teaching practices and ways to address the various learning styles of students in the human anatomy and physiology laboratory.

## Topics covered (Learning Goals):

During this two-semester course, students enrolled in BIOH480 will gain mastery of human anatomy and physiology as it pertains to health professionals attributed to the increase in preparation of course materials and conveying this information to students enrolled in BIOH365.

The two-semester sequence is divided as follows:

BIOH 480	BIOH 481
<b>Body Plan &amp; Organization</b> <b>Homeostasis</b> <b>Chemistry &amp; Cell Biology Review</b> <b>Histology</b> <b>Integumentary System</b> <b>Skeletal System &amp; Articulations</b> <b>Muscular System</b> <b>Nervous System</b> <b>Special Senses</b>	<b>Endocrine System</b> <b>Cardiovascular System</b> <b>Lymphatic System &amp; Immunity</b> <b>Respiratory System</b> <b>Digestive System</b> <b>Metabolism</b> <b>Urinary System</b> <b>Fluid/Electrolytes &amp; Acid/Base Balance</b> <b>Reproductive System</b>

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## Important Lab Meeting dates are below: topics may change

### Fall 2017 BIOH365 Rotation Schedule and sign ups

Lab topic	Rotations	Cadaver dissection due	Lab Meeting Presentation Date	Rotation Checkoff Date	UGTA	BIOH365 Lab Meeting I
<b>Surface Anatomy, Cellular anatomy and Physiology</b>	Torso Model/Cadaver: quadrants, regions, membranes and organs in each; planes TA: Anatomical Regions and planes; movements/pin the regions on the skeleton Cell: Parts of a cell and their respective functions		30-Aug 30-Aug 30-Aug	9/1/2017 (7am) 9/1/2017 (7am) 9/1/2017 (7am)		9/5-9/7 9/5-9/7 9/5-9/7
<b>Lab 2: Tissues and the Integumentary System</b>	Tissue Histology/Dichotomous Key Integumentary System Histology Burns/Accessory structures of skin		8-Sep 8-Sep 8-Sep	11-Sep 11-Sep 11-Sep		9/12-9/14 9/12-9/14 9/12-9/14
<b>Lab 3: Bone Histology and Axial Skeleton</b>	Bone Model and Bone Histology Vertebrae ID, Rib articulations, Sacrum, sternum Skulls (in-tact, exploded and fetal).		15-Sep 15-Sep 15-Sep	18-Sep 18-Sep 18-Sep		9/19-9/21 9/19-9/21 9/19-9/21
<b>Lab 4: Appendicular Skeleton</b>	Upper extremity Bone boxes Lower Extremity Bone boxes/ Pelvis ID Skeleton, with an emphasis on siding using palpable landmarks		22-Sep 22-Sep 22-Sep	25-Sep 25-Sep 25-Sep		9/26-9/27 9/26-9/27 9/26-9/27
<b>Lab 5: Articulations and Movement</b>	cadavers and knee model - Hip model and skeleton (shoulder vs hip) TMJ and Gomphoses	27-Sep 27-Sep	29-Sep 29-Sep 29-Sep	3-Oct 3-Oct 3-Oct		10/4-10/6 10/4-10/6 10/4-10/6
<b>Lab 6: Muscles of the Lower Extremity</b>	male cadaver female cadaver Lower Extremity Models/skeleton attachment sites	4-Oct 4-Oct	6-Oct 6-Oct 6-Oct	9-Oct 9-Oct 9-Oct		10/10-10/12 10/10-10/12 10/10-10/12
Extra open labs <b>lab practical 1: on labs 1-6 (Oct. 17-19)</b>	10/14-10/15 Arrive early to help your instructor		Sign up in the lab			
<b>Lab 7: Muscles of Upper extremity, anterior thorax and superficial posterior thorax</b>	male cadaver Female cadaver UE models/skeleton/attachment sites	18-Oct 18-Oct	20-Oct 20-Oct 20-Oct	23-Oct 23-Oct 23-Oct		10/24-10/26 10/24-10/26 10/24-10/26
<b>Lab 8: Muscles of the face, neck and deep back</b>	male cadaver female cadaver Models	25-Oct 25-Oct	27-Oct 27-Oct 27-Oct	30-Oct 30-Oct 30-Oct		10/31-11/2 10/31-11/2 10/31-11/2
<b>Lab 9: Nervous System: Brain (CSF model with the lab lecture; histology during lab lecture)</b>	Sheep Brains and correlation to human basic brain model Models cranial nerves and cadaver brains, dura mater	1-Nov 1-Nov	3-Nov 3-Nov 3-Nov	6-Nov 6-Nov 6-Nov		11/7-11/9 11/7-11/9 11/7-11/9
<b>Lab 10: Spinal Cord, spinal nerves and the PNS and ANS</b>	Cadavers: brachial plexus and Spinal cord male Cadavers: brachial plexus and Spinal cord female Upper and Lower Extremity Nerves- muscles models	8-Nov 8-Nov	11/10/2017 (veteran's day) 11/10/2017 (veteran's day) 11/10/2017 (veteran's day)	13-Nov 13-Nov 13-Nov		11/14-11/16 11/14-11/16 11/14-11/16
<b>Lab 11: Special Senses/ Peripheral nerves</b>	Eye Model and Special senses histology hearing and ear models Eye dissection		17-Nov 17-Nov 17-Nov	11/27/2017(after Tgiving) 11/27/2017(after Tgiving) 11/27/2017(after Tgiving)		11/28-11/30 11/28-11/30 11/28-11/30
Extra open labs <b>LAB PRACTICAL 2 Dec. 5-7</b>	12/2-12/3 Arrive early to help your instructor		Sign up in the lab			

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### MINIMUM requirements for BIOH480 Peer Leaders

- 1) Present the content from prepared rotation lesson plans during the mandatory Friday 7am-7:50am meeting to fellow PEER LEADERS and Instructors. The sign up sheet for these labs will be posted in the first course meeting or earlier.
- 2) Prepare and present two rotation lesson plans and BIOH365 student study sheets and to the fellow TAs and Lab instructors at the Friday 7am-7:50am meeting according to the sign up sheet posted in the lab.
- 3) Assist in teaching one lab per week. Assignments for these labs are made by Dr. Minns. Missing a lab without notifying Dr. Minns and your lab instructor will result in the automatic drop of one letter grade. Missing more than one assigned lab without contacting your lab instructor will lead to course failure.
- 4) Assist during one open lab period per week (2 hours) and one extra open lab prior to laboratory practical exams.
- 5) Participate in the TA check-off meeting on Mondays 5-7pm. Be fully prepared for scheduled BIOH365 laboratories by being familiar with cadaver prosections, histology slides, laboratory equipment operation, and laboratory teaching rotations.
- 6) Assist in preparing and grading the laboratory quizzes and practical examinations through the online Moodle question forums.
- 7) Demonstrate professionalism in your behavior. PEER LEADERS must consistently exhibit an understanding of the confidentiality of conversations regarding student performance and student grades.
- 8) Demonstrate a high degree of initiative and independence.
- 9) Include Dr. Minns in all email correspondence between yourself and students (you may use cc or bcc); if you do not know how to respond to student inquiries, please email Dr. Minns for advice.

### BEHAVIOR EXPECTATIONS

- 1) Above all, be professional and ethical in all your dealings with colleagues and the students.
- 2) At **NO** time are you to discuss the grades or performance of a student enrolled in BIOH365/370 with anyone other than the laboratory instructor, any Peer Leader teaching within the same laboratory section, or Dr. Minns.
- 3) Minimize the amount of body contact/touching between you and the students while instructing or supervising open laboratories.
- 4) Arrive at the laboratory (HS101) five or ten minutes early (unless you are constrained by your academic or work schedule).
- 5) Immediately address the needs of the laboratory instructor. For example what needs to be done so the quiz or practical examination can begin on time.
- 6) Proctor the quiz or practical examination. Proctoring requires vigilance and observation of student's activities and needs during examinations.
- 7) Put other personal or academic issues aside when it is time for you to interact with the students.
- 8) Do not bring food or drinks into the laboratory.
- 9) Be prepared
- 10) Review all information for the assigned lab.
- 11) Determine what specific objectives your laboratory instructor would like you to address
- 12) Design your teaching preparation and instruction around these objectives.
- 13) Prepare one question for your peers from the lab learning objectives and answer one question from your peers each week on Moodle by Monday at midnight of each week.
- 14) Review any tutorials provided for the assigned lab.
- 15) Review all information linked to the TA Moodle site.
- 16) Review completed "terms to know" for each scheduled lab.

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- 17) If you are unable to attend a lab meeting, contact the laboratory instructor at least one day prior to the scheduled lab to determine your teaching objective(s).
- 18) Be attentive as the laboratory instructor is providing answers to quiz questions so you can correctly grade the quizzes.
- 19) Assist with the supervision of **at least one open lab per week, and one 'extra' open lab during the pre-practical open lab week**. If your schedule prohibits you from meeting this obligation during the week, please correspond with Dr. Minns so that alternative arrangements can be made.
- 20) If your academic or work schedule precludes you from assisting with scheduled open laboratories, it is expected that you will arrange another time that does coincide with your schedule (which may include weekends).
- 21) A minimum of **two** PEER LEADERS must be in attendance for any of these additional open laboratories (no matter the day or the time).
- 22) Any of these additional open lab sessions must be scheduled at least five days in advance so the day(s) and time(s) can be placed on the Moodle page.
- 23) Be a good team member.
- 24) If another PEER LEADER requests help in reviewing a concept, do so without criticism.
- 25) If another PEER LEADER becomes ill or has some other scheduled conflict, be willing to "cover" their teaching responsibility.
- 26) If such an event does occur, **IT IS THE RESPONSIBILITY OF THE PEER LEADER, NOT** the laboratory instructor or Dr. Minns, to facilitate this "switch".
- 27) If you check out the key to HS 101, leave contact information for others who may want to gain access to the room. Return the key within three days of the date you have checked it out. **UNDER NO CIRCUMSTANCES** should this key ever be in the hands of someone other than a BIOH 365 Peer Leader a BIOH365 laboratory instructor, an official course tutor, or Dr. Minns. The key should **ALWAYS** be returned to the drawer by Monday morning.
- 28) Participate **EQUALLY** in the lab or prep room cleanup responsibilities assigned to your dissection team.
- 29) Be willing to admit when you do not know and answer, or have provided incorrect information.
- 30) Clean up after yourself and your dissection team.

### Evaluation Methods

Students will be evaluated each week on their ability to effectively teach their assigned lesson plan to their peers, laboratory instructors and Dr. Minns. Students will not be allowed to teach the material in the BIOH365 laboratory rotation until they exhibit mastery of the rotation material.

- ❖ The following factors will be considered during the rotation presentation evaluation (worth 40% of the total grade):
  - ❖ Effective use of proper anatomical, physiological and medical terminology.
  - ❖ The rotation presentation must be accurate and completely follow the established lesson plan.
  - ❖ The student must effectively engage peers and instructors in their teaching.
  - ❖ The student must effectively address peer and instructor questions to show mastery of the material.
  - ❖ The student must be able to complete the rotation information within the allotted time period.

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- ❖ Students will be evaluated by Laboratory Instructors as they teach the actual rotation in BIOH365 laboratories. The following factors will be evaluated by laboratory instructors (worth 20% of total grade):
  - ❖ Effective use of proper anatomical, physiological and medical terminology.
  - ❖ The rotation presentation must be accurate and completely follow the established lesson plan.
  - ❖ The student must effectively engage peers and instructors in their teaching.
  - ❖ The student must effectively address peer and instructor questions to show mastery of the material.
  - ❖ The student must be able to complete the rotation information within the allotted time period.
  - ❖ If the student does not know the answer to a question posed by a BIOH365 student, they are expected to find the appropriate answer by consulting with course materials and laboratory instructors/Dr. Minns.
- ❖ Students are required to be present and actively engage students during open labs (worth 20% of total grade)
- ❖ Monitor and respond to lab quiz questions on the Moodle page (worth 20% of total grade).
  - ❖ Students will automatically fail the class if they:
    - ❖ Discuss student performance or grades of a student enrolled in BIOH365 with anyone other than the laboratory instructor, other Peer Leader's teaching within the same laboratory section, an official course tutor, or, Dr. Minns
    - ❖ Provides access to the Peer Leader Moodle site to anyone who is not a laboratory instructor, tutor, or a fellow Peer Leader.
- ❖ A deduction of one letter grade will automatically occur as a result of:
  - ❖ One unexcused absence from a scheduled lab class or lab meeting.
  - ❖ Failure to submit your assigned lesson plan on time.
  - ❖ More than ONE incident in which you have not taken the initiative to contact the laboratory instructor at least one day prior to a scheduled lab to determine your teaching responsibilities.
  - ❖ More than ONE week during which you did not provide Dr. Minns one quiz or practical examination questions related to your teaching objectives PRIOR to the scheduled lab via email.

### Course Policies

Dr. Minns and the Laboratory Instructors follow academic policies as stated in the 2017-2018 Course catalogue. Students are responsible for being familiar with these policies.

<http://www.umt.edu/catalog/>

These policies include but are not limited to:

- Student Conduct ([http://life.umt.edu/vpsa/student\\_conduct.php](http://life.umt.edu/vpsa/student_conduct.php))
- Class attendance
- Credit/No Credit Grading
- No more than 18 CR credits may be counted toward graduation. Courses taken to satisfy General Education Requirements must be taken for traditional letter grade. Courses required for the student's major or minor must be taken for traditional letter grade, except at the discretion of the department concerned.
- A CR is given for work deserving credit (A through D-) and an NCR for work of failing quality (F). CR and NCR grades do not affect grade point averages. The grades of CR and NCR are not defined in terms of their relationship to traditional grades for graduate course work.

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- Election of the credit/no credit option must be indicated at registration time or within the first 15 class days on CyberBear. After the fifteenth day, but prior to the end of the 30th day of instruction, an undergraduate student may change a credit/no credit enrollment to an enrollment under the A F grade system, or the reverse by means of a drop/add form.
- The University cautions students that many graduate and professional schools and some employers do not recognize non traditional grades (i.e., those other than A through F) or may discriminate against students who use the credit/no credit option for many courses. Moreover, students are cautioned that some degree programs may have different requirements regarding CR/NCR credits, as stipulated in the catalog.

- Audit
- Incomplete Grading Policy

### Plagiarism

- Plagiarism is the representing of another's work as one's own. It is a particularly intolerable offense in the academic community and is strictly forbidden. Students who plagiarize may fail the course and may be remanded to Academic Court for possible suspension or expulsion. (See Student Conduct Code section of this catalog.)
- Students must always be very careful to acknowledge any kind of borrowing that is included in their work. This means not only borrowed wording but also ideas. Acknowledgment of whatever is not one's own original work is the proper and honest use of sources. Failure to acknowledge whatever is not one's own original work is plagiarism.

### **Students with Disabilities:**

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students. If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommason Center 154 or 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.

### **Cell Phones and other electronic devices**

The use of cell phones and other electronic devices (including cameras, video recorders) is STRICTLY prohibited during all class times, including examinations.

### **Disruptive behavior**

Students who are being disruptive in lecture by talking, texting or playing computer games will be asked to leave the classroom. Such behaviors impact the learning of other students in the classroom and will not be tolerated. Re-admittance to class is at the discretion of the instructor.

### **Respect for the Cadavers:**

*These donated cadavers are gifts and must be treated with the dignity and respect they deserve. It is inappropriate to make disrespectful comments within and outside of the laboratory. You will observe professional conduct while in the lab and outside the lab. Naming of the cadavers, unnecessary horseplay, posing of the cadavers, etc WILL NOT BE TOLERATED. These cadavers are the result of gifts from fellow Montanans and their families who believed strongly in the benefit of health science education.*

<http://www.montana.edu/wwwami/bodydonate.html>

Rules for Cadaver Use in the Anatomy and Physiology Labs:

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- 1) The cadavers used in this lab were obtained from the Montana Body Donation Program at Montana State University. Cadavers are donated to MSU according to state regulations. Persons donating their body receive no financial compensation; this is truly their ultimate gift. Hence it is imperative that proper respect be paid to the cadaver at all times.
- 2) Only students enrolled BIOH 365, BIOH 112 and teaching staff are allowed into the cadaver lab at any time. No minor children or other family members are to be brought to the open lab times. If you see someone in the lab who you believe is unauthorized, notify laboratory personnel and/or ask him/her to leave the lab.
- 3) Body parts, tissue, etc must not be removed from the lab.
- 4) No cameras, camera phones or electronics with photo or video capability are allowed in the lab. Photography is prohibited.
- 5) Please be careful, the cadaver dissections will be used and material reviewed in other lab sections by other students. Keep the dissections moist and well covered when not working on that portion of the cadaver. Keep doors to lab closed and locked to keep security intact; students should police the lab.

### Laboratory Safety in the Anatomy and Physiology Labs

- 1) In case of an emergency, dial extension 4000 to report serious injuries. Phones are located throughout the Health Sciences Building. The Health Sciences main office is in room 104.
- 6) First Aid supplies are available in the supply room for HS 101 (the anatomy lab), HS 104 (the main office) and HS 403.
- 7) You are required to wear disposable gloves (nitrile or neoprene, latex gloves are not acceptable) at all times while working with the cadaver prosections. Cadavers are embalmed with a fluid containing propylene glycol, ethyl alcohol, phenol and formaldehyde. Physical contact of your skin and clothing should be avoided.
- 8) Wear old clothes and a long-sleeved lab coat while working with the cadaver. Lab coats should not be worn outside the lab.
- 9) No open-toes shoes or sandals are allowed in the lab. Wear shoes that cover your entire foot.
- 10) Contact lens wearers should be aware that chemical fumes can pass into gas permeable and soft lenses. These fumes irritate the cornea. Protective glasses (prescription or safety glasses) are recommended to protect against chemical splashes. Know the location of the eyewash station before you begin.
- 11) If you are pregnant, or believe you may be pregnant, you may NOT participate in the laboratories until you provide Dr. Minns with written documentation from your obstetrician that verifies an understanding of the chemicals to which you and your fetus are being exposed while in the presence of the cadavers.
- 12) No foods, drinks, gum or the application of makeup are allowed in the lab.
- 13) Respirators can be purchased for use in the lab, if desired.
- 14) Wash hands prior to leaving the lab.

SKILL	CHARACTERISTICS
1. Commitment to learning	Demonstrates a positive attitude (motivation) toward learning; identifies and locates appropriate resources; identifies need for further information; prioritizes information needs; welcomes and/or seeks new learning opportunities.
2. Interpersonal	Maintain a professional demeanor in all interactions; is non-judgmental about



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skills	students' lifestyles; communicates with others in a respectful manner; assumes responsibility for own actions; respects cultural and personal differences of others; demonstrates acceptance of limited knowledge and experience; motivates others to achieve; approaches others in a professional manner to discuss differences in opinion.
3. Communication skills	Uses correct grammar, accurate spelling and expression; writes legibly; listens actively; communicates with others in a confident manner; recognizes impact of non-verbal communication and modifies accordingly, maintains open and constructive communication.
4. Effective use of time and resources	Focuses on tasks at hand; recognizes own resource limitations; uses existing resources effectively; uses unscheduled time efficiently; completes assignments in a timely fashion; sets up own schedule; coordinates schedule with others; demonstrates flexibility; plans ahead; sets priorities and recognizes when needed; performs multiple tasks simultaneously.
5. Use of constructive feedback	Demonstrates active listening skills; actively seeks feedback and help; demonstrates a positive attitude toward feedback; critiques own performance; maintain two-way information; assesses own performance accurately; develops plan of action in response to feedback; reconciles differences with sensitivity.
6. Problem solving	Recognizes problems; states problems clearly; describes known solutions to problem; analyzes and subdivides large questions into components; accepts that there may be more than one answer to a problem.
7. Professionalism	Abides by U of M Student Conduct Code; projects professional image; demonstrates accountability for personal and professional decisions; maintains confidentiality in all interactions.
8. Responsibility	Demonstrates dependability; demonstrates punctuality; follows through on commitments; accepts responsibility for action and outcomes; p[rovides safe environment for students; recognizes own limits; offers and accepts help; completes projects without prompting.
9. Critical thinking	Raises relevant questions; considers all available information; articulates and formulates new ideas; seeks alternative ideas; exhibits openness to contradictory ideas.
10. Stress management	Maintains professional demeanor in all situations; accepts constructive feedback; recognizes own stressors or problems; maintains balance between professional and personal life; demonstrates effective affective responses in all situations.

The information in the above table will be considered if you should ask me to write a letter of recommendation for you.

Learning outcomes

Laboratory Dates	Topic	Learning Outcomes	Course Resources
9/5-9/7	<p>Lab1:</p> <p>Lab Orientation – Protocols and Procedures</p> <p>Introduction to Anatomical Terms, Gross and Surface Anatomy</p> <p>Cellular anatomy and physiology</p> <p><u>You must bring your own Nitrile gloves to the lab (not latex).</u></p> <p>(you can purchase these in the bookstore or at a local pharmacy).</p>	<p><u>HAPS Modules A,B, C:</u></p> <p>Describe the scope of studies in anatomy and physiology and be able to use and understand descriptive anatomical and directional terminology.</p> <p>Identify cellular structures and explain their respective functions.</p>	<p>Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed</p>
9/12-/14	<p>Lab 2: Histology – Tissue Form and Function</p> <p>The Integumentary System and Membranes</p>	<p><u>HAPS Module D:</u></p> <p>Describe the basic tissues of the body, their location and explain their function.</p> <p><u>HAPS Module E:</u></p> <p>Identify and describe the major gross and microscopic anatomical component of the integumentary system and describe the functions of this system.</p>	<p>Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed</p>
9/19-9/21	<p>Lab 3: Bone – Histology</p>	<p><u>HAPS Modules E, F</u></p> <p>Identify and describe</p>	<p>Review the Corresponding Chapters in the McKinley Text and the Connect online activities,</p>

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	<p>Classification and types of osseous tissue</p> <p>The Axial Skeleton and its landmarks</p> <p>Fetal Skeletons</p>	<p>the major gross and microscopic anatomical components of the skeletal system and explain their functional roles in osteogenesis, repair and body movement.</p>	<p>including Anatomy Revealed</p>
9/26-9/28	<p>Lab 4: Appendicular Skeleton and its landmarks</p>	<p><u>HAPS Mod G, H</u></p> <p>Identify and describe the major gross and microscopic anatomical components of the muscular system and explain their functional roles in body movement, maintenance of posture and heat production.</p>	<p>Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed</p>
10/3-10/5	<p>Lab 5: Articulations and Movement</p>	<p>Identify and describe the major gross and microscopic anatomical components of the nervous system and explain their functional roles in communication, control and integration.</p>	<p>Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed</p>
10/10-10/12	<p>Lab 6: Muscles 1</p> <p>Histology and Microanatomy</p> <p>Identification (ID) and Origin, Insertion, and Action (OIA) and innervation of the muscles of gluteal compartment and lower extremity</p>	<p>Identify and describe the major gross and microscopic anatomical components of the nervous system and explain their functional roles in communication, control and integration.</p>	<p>Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed</p> <p>(*You must be able to ID, define the origin, insertion, action and innervation of all muscles from Lab 6 Objectives and assigned readings; please use the tables in McKinley to help with your OIAs)</p>
10/17-10/19	<p><b>**Lab Practical #1**</b></p>	<p>Covers Labs 1-6</p>	<p>Bring Gloves; Missed Lab Practicals CANNOT be made up.</p>
10/24-10/26	<p>Lab 10: 7: Muscles 2</p> <p>ID and OIA and innervation of the muscles the upper</p>	<p><u>HAPS Mod G, H</u></p> <p>Identify and describe the major gross and microscopic</p>	<p>Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed</p>

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	limb, anterior thorax and extrinsic back muscles	anatomical components of the muscular system and explain their functional roles in body movement, maintenance of posture and heat production.	(*You must be able to ID, define the origin, insertion, action and innervation of all muscles from Lab 7 Objectives and assigned readings; please use the tables in McKinley to help with your OIAs)
10/31-11/2	Lab 8: Muscles 3  ID, OIA and innervation of the muscles of the head, neck, face and intrinsic muscles of the back	Identify and describe the major gross and microscopic anatomical components of the nervous system and explain their functional roles in communication, control and integration.	Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed  (*You must be able to ID, define the origin, insertion, action and innervation of all muscles from Lab 8 Objectives and assigned readings; please use the tables in McKinley to help with your OIAs)
11/7-11/9	Lab 9: Nervous Tissue Histology  Brain Anatomy and Physiology  Cranial Nerves – Identification and function		Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed
11/14-11/16	Lab 10:  Spinal Cord: ANS organization and PNS branching, Brachial Plexus	<u>HAPS Mod G, H</u>  Identify and describe the major gross and microscopic anatomical components of the muscular system and explain their functional roles in body movement,	Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed

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		<p>maintenance of posture and heat production.</p> <p>Identify and describe the major gross and microscopic anatomical components of the nervous system and explain their functional roles in communication, control and integration.</p>	
11/21-11/23		<p><u>No official labs due to Thanksgiving Holiday</u></p>	
11/28-11/30	Lab 11: Special Senses/	<p><u>HAPS Module I</u></p> <p>Identify and describe the major gross and microscopic anatomical components of the eye and ear and explain their function roles in vision, hearing and equilibrium.</p>	<p>Review the Corresponding Chapters in the McKinley Text and the Connect online activities, including Anatomy Revealed</p>
12/5-12/7	**Lab Practical #2**	<p>Covers Labs 7-11</p>	<p>Bring Gloves; Missed Lab Practicals CANNOT be made up.</p>