

University of Montana

ScholarWorks at University of Montana

University of Montana Course Syllabi

Open Educational Resources (OER)

Fall 9-1-2021

BIOH 480.80: Teaching Anatomy and Physiology I (Honors)

Audrey Vail Broffman

University of Montana, Missoula, audrey.broffman@umontana.edu

Carley R. Carpenter

University of Montana, Missoula, carley.carpenter@umontana.edu

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

Let us know how access to this document benefits you.

Recommended Citation

Broffman, Audrey Vail and Carpenter, Carley R., "BIOH 480.80: Teaching Anatomy and Physiology I (Honors)" (2021). *University of Montana Course Syllabi*. 12216.

<https://scholarworks.umt.edu/syllabi/12216>

This Syllabus is brought to you for free and open access by the Open Educational Resources (OER) at ScholarWorks at University of Montana. It has been accepted for inclusion in University of Montana Course Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

BIOH480 Syllabus Fall 2021

BIOH480 (honors): Teaching Anatomy and Physiology I Syllabus Fall 2021

Instructors: Audrey Broffman and Carley Carpenter

- Office: HS 103
- Phone: (404) 901-4516; (406) 366-2147
- Office Hours: By appointment
- Email: audrey.broffman@umontana.edu, carley.carpenter@umontana.edu

**** Pre-requisite: Grade of B- or higher in BIOH365, consent of instructor**

Course Meeting Times:

- Wednesdays 5:30pm-6:15pm: rotation check off
- Fridays 5pm: Unofficial and official dissection check off deadline
- Assigned lab

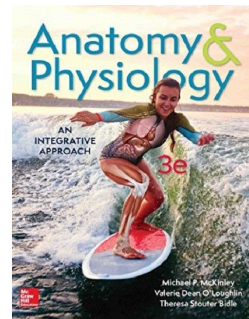
Course Structure:

- 1) Lecture, discussion and preparation of laboratory materials for BIOH366.
- 2) Weekly mandatory meetings to discussing teaching strategies effective for undergraduate BIOH366 cadaver labs
- 3) Supervised teaching of laboratory activities in one BIOH366 laboratory per week
- 4) Supervised teaching during weekly open labs for BIOH366 students.

Required materials:

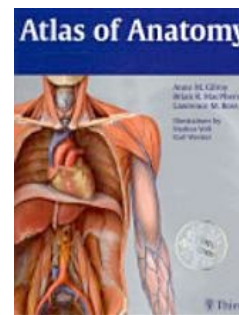
Required Course Materials:

Anatomy and Physiology, an Integrative Approach, 3ed. McKinley, O'Loughlin, Bidle. McGraw Hill, 2018 McGraw Hill Connect online supplement. (the 2nd edition is acceptable as well).



Optional Course Materials:

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



BIOH480 Syllabus Fall 2021

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 (BIOH366). 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 BIOH366.

The two-semester sequence is divided as follows:

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

BIOH480 Syllabus Fall 2021

MINIMUM requirements for BIOH480 Peer Leaders:

- 1) Attend and be prepared to teach 2 hours' worth of open labs every week.
- 2) Assist in teaching one lab per week. Missing a lab without notifying 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.
- 3) Participate in the TA check-off meeting on Wednesdays 5-6pm.
- 4) Be fully prepared for scheduled BIOH366 laboratories by being familiar with cadaver prosecutions, histology slides, laboratory equipment operation, and laboratory teaching rotations.
- 5) Post one lab quiz question per week in the linked Google doc.
- 6) Demonstrate professionalism in your behavior. Peer leaders must consistently exhibit an understanding of the confidentiality of conversations regarding student performance and student grades.
- 7) Demonstrate a high degree of initiative and independence.
- 8) Include your instructor 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 your instructor or Dr. Tobalske for advice.
- 9) Communicate with your dissection partners to ensure dissections are completed on time, that decisions regarding dissections are unanimously agreed upon, and that work is distributed in a way that is deemed fair by those in the group.

Behavior Expectations:

Above all, be professional and ethical in all your dealings with colleagues and the students.

- 10) At **NO** time are you to discuss the grades or performance of a student enrolled in BIOH366/371 with anyone other than the laboratory instructor, any peer leader teaching within the same laboratory section, or Dr. Tobalske.
- 11) Arrive at the laboratory (HS101) five or ten minutes early (unless you are constrained by your academic or work schedule).
- 12) Immediately address the needs of the laboratory instructor (i.e. what needs to be done so the quiz or practical examination can begin on time.)
- 13) Proctor the quiz or practical examination. Proctoring requires vigilance and observation of student's activities and needs during examinations.
- 14) Put other personal or academic issues aside when it is time for you to interact with the students.
- 15) Do not bring food or drinks into the laboratory.
- 16) Be prepared.
- 17) Review all information for the assigned lab.
- 18) Determine what specific objectives your laboratory instructor would like you to address.
- 19) Design your teaching preparation and instruction around these objectives.
- 20) Review any tutorials provided for the assigned lab.
- 21) Review all information linked to the TA Moodle site.
- 22) Be a good team member.
- 23) If another peer leader requests help in reviewing a concept, do so without criticism.
- 24) If another peer leader becomes ill or has some other scheduled conflict, be willing to "cover" their teaching responsibility.
- 25) If such an event does occur, **IT IS THE RESPONSIBILITY OF THE PEER LEADER, NOT** the laboratory instructor or Dr. Tobalske, to facilitate this "switch".
- 26) 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

BIOH480 Syllabus Fall 2021

it out. **UNDER NO CIRCUMSTANCES** should this key ever be in the hands of someone other than a BIOH 366 Peer Leader a BIOH366 laboratory instructor, an official course tutor, or Dr. Tobalske. The key should **ALWAYS** be returned to the drawer by Monday morning.

- 27) Participate **EQUALLY** in the lab or prep room cleanup responsibilities assigned to your dissection team.
- 28) Be willing to admit when you do not know and answer, or have provided incorrect information.
- 29) Clean up after yourself and others after every lab.
- 30) Monitor the laboratory during all class visits to insure that all procedures are being followed appropriately.
- 31) Enforce HIPAA regulations.
- 32) Notify Dr. Tobalske immediately if you observe suspicious behavior.

Evaluation Methods

Students will be evaluated each week on their ability to effectively teach their assigned lesson plan to their peers and laboratory instructors. Students will not be allowed to teach the material in the BIOH366 laboratory rotation until they exhibit mastery of the rotation material.

- ❖ The following factors will be considered during the rotation presentation evaluation (worth 50% 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.
- ❖ Students will be evaluated by Laboratory Instructors as they teach the actual rotation in BIOH366 laboratories. The following factors will be evaluated by laboratory instructors (worth 30% 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 BIOH366 student, they are expected to find the appropriate answer by consulting with course materials and laboratory instructors/Dr. Tobalske..
 - ❖ Students will automatically fail the class if they:
 - ❖ Discuss student performance or grades of a student enrolled in BIOH366 with anyone other the laboratory instructor, other peer leader's teaching within the same laboratory section, an official course tutor, or Dr. Tobalske
 - ❖ Provides access to the peer leader Moodle site to anyone who is not a laboratory instructor, tutor, or a fellow peer leader.

BIOH480 Syllabus Fall 2021

- ❖ Students will be evaluated by Laboratory Instructors on their dissection participation and completion (worth 20% of total grade):
 - ❖ Students must ensure that they schedule their UCO's and CO's by the deadline.
 - ❖ Students will ensure that dissections are completed to their instructor's satisfaction by the time of the official check-off prior to presenting the cadaver in lab.
 - ❖ Students will collaborate within dissection groups to ensure fair participation during dissections.
 - ❖ Students will always perform a thorough cleaning of the lab after their dissections, including cleaning dissection tools, proper storage of tissue, proper application of wetting solution and storage of the cadaver, and replacing any materials that are low in stock in the lab.
- ❖ A deduction of one letter grade will automatically occur as a result of:
- ❖ One unexcused absence from a scheduled lab class or lab meeting.
- ❖ 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.
- ❖ One incomplete dissection or missed check-off deadline without prior communication with the dissection group's instructor.

Course Policies

Dr. Tobalske and the Laboratory Instructors follow academic policies as stated in the 2020-2021 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)
- 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.
- 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

BIOH480 Syllabus Fall 2021

- 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.

Cultural Leave Policy

UM has a Cultural and Ceremonial Leave Policy: "Cultural or ceremonial leave allows excused absences for cultural, religious, and ceremonial purposes to meet the student's customs and traditions or to participate in related activities. To receive an authorized absence for a cultural, religious or ceremonial event the student or their advisor (proxy) must submit a formal written request to the instructor. This must include a brief description (with inclusive dates) of the cultural event or ceremony and the importance of the student's attendance or participation. Authorization for the absence is subject to approval by the instructor. Appeals may be made to the Chair, Dean or Provost. The excused absence or leave may not exceed five academic calendar days (not including weekends or holidays). Students remain responsible for completion or make-up of assignments as defined in the syllabus, at the discretion of the instructor."

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.

Cadaver Care:

Students are expected to keep the cadaver's moist through the use of wetting solution. Wetting solution must be made and used regularly. There will be a sign-up sheet in the lab where students record their use of re-stocking of wetting solution.

Access to the Laboratory Outside of Regularly Scheduled Class Hours

Students are expected to complete dissections when the labs are not in use for other undergraduate teaching. There is a calendar on the course Moodle page so that students/lab instructors and Dr. Tobalske use in order to schedule activities in the lab. Dissectors must sign up in advance and check out the designated lab key. Groups of two or more dissectors must be in the lab during dissection for safety reasons. Please locate the safety features in the lab and make sure the lab door is closed and locked during dissections.

BIOH480 Syllabus Fall 2021

Accessibility Syllabus Statement

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and the Office for Disability Equity (ODE). If you anticipate or experience barriers based on disability, please contact the ODE at: (406) 243-2243, ode@umontana.edu, or visit www.umt.edu/disability for more information. Retroactive accommodation requests will not be honored, so please, do not delay. As your instructor, I will work with you and the ODE to implement an effective accommodation, and you are welcome to contact me privately if you wish.

COVID-19 Safety Protocols

- 1) Review the University of Montana policies and suggestions surrounding Covid-19. They can be found at the following link:
https://www.umt.edu/coronavirus/coronavirus_faqs.php
- 2) You must wash your hands before exiting the lab.
- 3) If you are experiencing any symptoms of Covid-19, contact your lab instructor and *stay home*. You will not be penalized for missing activities due to illness.

Laboratory Specimen and Cadaver Information and Policies:

Much of your education in anatomy will result from a selfless donation of thoughtful individuals who voluntarily chose to donate their body to the Montana Body Donation Program that supports WWAMI education programs. *WWAMI (Washington, Wyoming, Alaska, Montana and Idaho) is a cooperative regional medical education program of the University of Washington School of Medicine that provides places for twenty Montana students per year in its entering medical student class. These twenty students take their first year of medical school at Montana State University and complete their studies at the University of Washington in Seattle and at community clinical training sites throughout the Northwest.*

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:

- 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.

BIOH480 Syllabus Fall 2021

- 2) Only students enrolled BIOH 366, 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.
- 6) The Health Insurance Portability and Accountability Act of 1996 is in effect with regard to the cadavers. Any breach of privacy will be taken very seriously. Any violation of HIPAA in the cadaver lab will result in immediate removal from the course, a final course grade of F and the case will be referred to the Dean of Students for disciplinary action according to the student conduct code. Federal charges may also be brought against individuals who violate HIPAA. Students are responsible for knowing these regulations and abiding by them inside and outside the classroom.
<https://www.hhs.gov/hipaa/index.html>
- 7) **Students are required to constantly monitor and insure that proper procedures are maintained in the laboratory and report any suspicious activity to Dr. Tobalske immediately.**

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.
- 2) First Aid supplies are available in the supply room for HS 101 (the anatomy lab), HS 104 (the main office) and HS 403.
- 3) You are required to wear disposable gloves (nitrile or neoprene, latex gloves are not acceptable) at all times while working with the cadaver prosecutions. Cadavers are embalmed with a fluid containing propylene glycol, ethyl alcohol, phenol and formaldehyde. Physical contact of your skin and clothing should be avoided.
- 4) Wear old clothes and a long-sleeved lab coat while working with the cadaver. Lab coats should not be worn outside the lab.
- 5) No open-toes shoes or sandals are allowed in the lab. Wear shoes that cover your entire foot.
- 6) 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.
- 7) If you are pregnant, or believe you may be pregnant, you may NOT participate in the laboratories until you provide Dr. Tobalske 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.
- 8) No foods, drinks, gum or the application of makeup are allowed in the lab.
- 9) Respirators can be purchased for use in the lab, if desired.
- 10) Wash hands prior to leaving the lab.

BIOH480 Syllabus Fall 2021

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 skills	Maintain a professional demeanor in all interactions; is non-judgmental about 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.

BIOH480 Syllabus Fall 2021

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

Topic	Learning Outcomes	Course Resources
Lab1: Lab Orientation – Protocols and Procedures Introduction to Anatomical Terms, Gross and Surface Anatomy Cellular anatomy and physiology <u>You must bring your own Nitrile gloves to the lab (not latex).</u> (you can purchase these in the bookstore or at a local pharmacy).	<u>HAPS Modules A,B, C:</u> Describe the scope of studies in anatomy and physiology and be able to use and understand descriptive anatomical and directional terminology. Identify cellular structures and explain their respective functions.	Review the Corresponding Chapters in the McKinley Text
Lab 2: Histology – Tissue Form and Function	<u>HAPS Module D:</u> Describe the basic tissues of the body,	Review the Corresponding Chapters in the McKinley Text

BIOH480 Syllabus Fall 2021

The Integumentary System and Membranes	<p>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>	
Lab 3: Bone – Histology	<u>HAPS Modules E, F</u>	Review the Corresponding Chapters in the McKinley Text
Classification and types of osseous tissue	Identify and describe the major gross and microscopic anatomical components of the skeletal system and explain their functional roles in osteogenesis, repair and body movement.	
The Axial Skeleton and its landmarks		
Fetal Skeletons		
Lab 4: Appendicular Skeleton and its landmarks	<u>HAPS Mod G, H</u>	Review the Corresponding Chapters in the McKinley Text
Lab 5: Articulations and Movement	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
Lab 6: Muscles 1	maintenance of posture and heat production.	Review the Corresponding Chapters in the McKinley Text
Histology and Microanatomy		(*You must be able to ID, define the origin, insertion, action and innervation of all muscles from Lab 6 Objectives and assigned
Identification (ID) and Origin, Insertion,	Identify and describe the major gross and	

BIOH480 Syllabus Fall 2021

and Action (OIA) and innervation of the muscles of gluteal compartment and lower extremity	microscopic anatomical components of the nervous system and explain their functional roles in communication, control and integration.	readings; please use the tables in McKinley to help with your OIAs)
Lab Practical #1	Covers Labs 1-6	Bring Gloves; Missed Lab Practicals CANNOT be made up.
Lab 10: 7: Muscles 2	<u>HAPS Mod G, H</u>	Review the Corresponding Chapters in the McKinley Text
ID and OIA and innervation of the muscles the upper limb, anterior thorax and extrinsic back muscles	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.	(*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)
Lab 8: Muscles 3		Review the Corresponding Chapters in the McKinley Text
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.	(*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)
Lab 9: Nervous Tissue Histology		Review the Corresponding Chapters in the McKinley Text
Brain Anatomy and Physiology		

BIOH480 Syllabus Fall 2021

Cranial Nerves –
Identification and
function

Lab 10:

HAPS Mod G, H

Review the Corresponding
Chapters in the McKinley Text

Spinal Cord: ANS
organization and
PNS branching,
Brachial Plexus

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.

Identify and describe
the major gross and
microscopic
anatomical
components of the
nervous system and
explain their functional
roles in
communication, control
and integration.

No official labs due to
Thanksgiving Holiday

Lab 11: Special
Senses/

HAPS Module I

Review the Corresponding
Chapters in the McKinley Text

Identify and describe
the major gross and
microscopic
anatomical
components of the eye

BIOH480 Syllabus Fall 2021

and ear and explain
their function roles in
vision, hearing and
equilibrium.

****Lab Practical #2****

Covers Labs 7-11

Bring Gloves; Missed Lab
Practicals CANNOT be made up.

BIOH366 Important Dates REGULAR LAB SCHEDULE

Dates	Lab	Rotations
Aug 31 – Sep 2	Lab 1: Introduction	<ol style="list-style-type: none"> 1. The Cell 2. Anatomical terminology 3. Organ systems, regions of the cadaver, and membranes
Sep 7 - 9	Lab 2: Histology and Integument	<ol style="list-style-type: none"> 1. Intro to tissue histology 2. Cutaneous membrane 3. Accessory organs
Sep 14 - 16	Lab 3: Axial Skeleton and Bone Histology	<ol style="list-style-type: none"> 1. Skulls 2. Ribs/vertebrae 3. Histology
Sep 21 - 23	Lab 4: Appendicular Skeleton	<ol style="list-style-type: none"> 1. Pectoral girdle 2. Pelvic girdle
Sep 28 - 30	Lab 5: Joints	<ol style="list-style-type: none"> 1. Knee (cadaver) 2. Hip-Shoulder 3. TMJ-gomphosis
Oct 5 - 7	Lab 6: LE Muscles (extra open labs)	<ol style="list-style-type: none"> 1. Male cadaver 2. Female cadaver 3. Models
Oct 12 - 14	PRACTICAL 1	
Oct 19 - 21	Lab 7: UE Muscles (extra open labs)	<ol style="list-style-type: none"> 1. Male cadaver 2. Female cadaver 3. Models
Oct 26 - 28	Lab 8: More Muscles	<ol style="list-style-type: none"> 1. Male cadaver

BIOH480 Syllabus Fall 2021

		2. Female cadaver 3. Models
Nov 2 - 4	Lab 9: Brain and CNs	1. Cadaver brains 2. Cranial nerves 3. Models
Nov 9 - 11	Lab 10: Spinal cord and PNS	1. Male cadaver brachial plexus 2. Female cadaver brachial plexus 3. Models
Nov 16 - 18	Lab 11: Special Senses	1. Sheep eyes 2. Eye models 3. Ear models
Nov 30 – Dec 2	PRACTICAL 2	
Finals Week	No class	

TA ROTATION REVIEW MEETING DATES

Lab	Meeting Date
Lab 2: Histology and the Integumentary System	9/1
Lab 3: Bones of the Axial Skeleton	9/8
Lab 4: Bones of the Appendicular Skeleton	9/15
Lab 5: Joints and Articulations	9/22
Lab 6: Lower Extremity Muscles	9/29
Lab 7: Upper Extremity Muscles	10/13
Lab 8: Muscles of Face, Neck, and Deep Back	10/20
Lab 9: Brain and Cranial Nerves	10/27
Lab 10: Spinal Cord, Peripheral Nervous System, and Spinal Nerves	11/3
Lab 11: Special Senses	11/10

Holidays (no classes or check-offs):

Labor Day: Monday, 9/6

Veteran's Day: Thursday, 11/11

BIOH480 Syllabus Fall 2021

Thanksgiving: 11//24-11/26