Physiology Laboratory for Pre-Health Professionals (PSL 311L)
Michigan State University: Department of Physiology

Fall Semester, 2021

*Section 001: W 10:20-1:10pm

*Section 002: W 3:00-5:50pm

*Section 003: Th 9:10-12:00pm

*Section 004: Th 1:50-4:40pm

*All labs are scheduled as In-Person meetings

Popular Quick links:

Instructor/TA's contact info
MSU Community Impact of COVID 19
Lab Safety Protocol
Masks/Face coverings
Exposure or Positive test for COVID-19
Attendance
Lt Access Code Purchase Link
Appealing a lab submission grade
Honor's Option
Recommendation Letter policy
Lab Topic Schedule

Course Description:

This laboratory course will be delivered as an "in person" experience and is designed to be taken either concurrently or in sequence of PSL 310 Human Physiology for Pre-Health Professionals. Students will perform weekly experiments on various aspects of human body function and potentially animal model where appropriate. The following laboratory exercises in physiology will include cardiovascular and respiratory function, nerve and muscle function, reflexes, endocrine, renal, digestive and metabolism with a focus on key concepts of homeostasis as they relate to the health professions. Weekly exercises/assignments will include readings, developing an awareness and adherence to standardized laboratory protocols for data collection and clinical analysis, and forming clinical correlates respecting relevant physiological principles as applied to various integrated body systems. **(2 Credits/ 3 in class hours a week).**

Prerequisites/Corequisites:

In order to participate in this course, the student must have successfully passed PSL 310 or PSL 432 or concurrently enrolled in either of these courses, or have already completed PSL 250 and KIN 310 and 1 semester of CEM. Prerequisites may apply to these courses as well. It is also

understood that the successful student will have had some background in Chemistry and Biology to be able to analyze complex physiological processes at the 300 level. Any special situations requiring an override should fill out the [override request form](#), for determination of eligibility. Check with your advisor if you are not sure.

Course Objectives and Learning Outcomes:

By the completion of this course, the successful student will be able to;

1. Demonstrate an in depth understanding of the physiology core concepts and mechanisms required to maintain the overarching "big idea" of homeostasis.
2. Execute measurements of homeostatic physiological variables and be able to explain standard clinical measurement techniques used to obtain these variables.
3. Prepare and analyze physiological data in table and graphical format and be able to discuss with their peers, associations between physiological core concepts and their clinical relevance.
4. Demonstrate safety in and outside the laboratory environment including awareness of standard laboratory procedures, personal hygiene using OSHAA standards, and handling bodily fluids.
5. Prepare, operate and troubleshoot complex medical equipment including sphygmomanometer, stethoscope, and flow spirometer.
6. Demonstrate the ability to work in clinical teams when collecting, synthesizing, integrating, and summarizing data for making evidence-based decisions for predictive purposes.
7. Observe various forms of healthcare related media and give examples of physiological principles applied within.
8. Communicate physiology in writing targeting a broad range of audiences from scientific experts to the lay public.
9. Discuss, support and self-analyze professional growth characteristics within a quasi-clinical environment that are also essential to becoming a successful future healthcare provider.

Instructor Information:

Major General of Learning
John Zubek, PT, MS, DPT
Assistant Professor of Physiology
Office: 3177 Biomedical and Physical Science Building
Email: Use D2L Email or zubekjoh@msu.edu (preferred correspondence) Please include your inquiry topic in subject line. Allow 2-4 hours to reply for standard course related inquiries. For all others, please give up to 24 hours.

Office Hours: Generally, on **Tuesdays and Fridays 1:00-2:00 pm (**in person or zoom**)** BPS 3177**,** and informal office hours Wednesdays and Thursdays (in person) from 12:30-1:30pm in Nat Sci room 139. I will post a Zoom Office Hours link in D2L. I will use Zoom waiting room. So if you log in and are held there, I am with a student at the moment.

Graduate Assistants

Learning - Lieutenant Colonel
Devika Bahal, Ph.D. Candidate Comp Med & Integrative Biology
Email: bahaldev@msu.edu Office hours: Friday's 4-5pm Zoom help session/ by appointment

Learning - Second Lieutenant
Gokul Murali, B.S. Physiology

Email: muraligo@msu.edu   Office hours: Friday's 4-5pm Zoom help session/ by appointment

Assistant Lab Manager/Instructional Assistant

Learning Sergeant Major, Natasha Chinoy, B.S. Kinesiology

Email: chinoyna@msu.edu

Deputy Learning Assistants

Learning Master Sergeant, Jackson Joseph, B.S. Physiology

Email: joseph93@msu.edu

Assistant Instructor/Lab Manager

Chief Warrant Officer 2 (of learning), Keeler Steele. B.S. Physiology
Email: Steele50@msu.edu   Office hours: by appointment

Important Note!

If you should make an appointment to meet with the Instructor, TA, LA or Lab Instructor and do not show for your appointment without valid excuse, you will only be allowed to use open office hours in the future. Our Laboratory Students, Staff and Faculty are very busy and have a number of duties each day as part of their academic assignments. While we are happy to assist you in any way we can with your learning, please also respect our time constraints.

Assignments and Grading (assignments will be further discussed in detail below)

11 Pre-Lab assignments (10 pts each) 110 pts total
11 weekly laboratory assignments (40 pts each) 440 pts total
12 Post Lab/Professionalism Modules (5 pts each) 60 pts total
1 ArmChair MD/ or SimplB.io project (50 pts) 50 pts total
1 Skills Assessment Practical (50 pts) 50 pts total
1 Professionalism/Self-Assessment (25 pts) 25 pts total
1 Mid-Term Exam (50pts) 50 pts total
1 Final Exam (210 pts) 210 pts total
Total points =1000 pts

Grading Scale (Note: final grades will be calculated based on POINT totals. I do not round up).
4.0   93%   930 - 1000 pts

3.5   86%   860 - 929 pts
3.0   80%   800 - 859 pts
2.5   75%   750 - 799 pts
2.0   70%   700 - 749 pts
1.5   65%   650 - 699 pts
1.0   60%   600 - 649 pts
0   <60%   599 pts or less

Why is our grading scale higher than the typical MSU scale?

We are a TEAM oriented setting and teams ALWAYS work to elevate the outcome to a higher level. Therefore, we EXPECT each of you to step up and help your colleagues shine.

Technical Requirements

Technical Requirements are similar to the online PSL 310 course. You can access those using this (google doc link). Ignore the "Exams" section of the PSL 310 document.

For problems with D2L or technical issues, you should contact the D2L Help Line at (517) 432-6200 OR (844) 678-6200 (you can call 24 hours a day, 7 days a week). These numbers are also listed in the Orientation module in D2L. You should first go to the Helpline for any computer or technical issues. I am happy to be a backup assist but may not be able to help you in a timely manner with technical issues.

Internet browsers and speeds

Browser/mobile support for D2L:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Generally speeds of 25Mbps should be adequate for this course.
https://broadbandnow.com/guides/how-much-internet-speed-do-i-need.

Accessing internet connections on or near campus: https://remote.msu.edu/learning/internet.html

MSU Community Compact regarding COVID-19:

The novel coronavirus, which causes the disease COVID-19, has been declared a worldwide pandemic. The COVID-19 virus is extremely contagious and is believed to spread mainly from person-to-person contact. The COVID-19 pandemic represents an unprecedented public health crisis that has impacted every facet of life, including the classroom environment. As a result, significant changes in how we conduct in-person classes must be made. This section of the syllabus discusses the policies and procedures we will use in class.

This class abides by all principles, guidelines, and requirements detailed in the MSU Community Compact. Specifically, all participants in the class will adhere to the following:

Face Coverings/Masks
Individuals with COVID-19 are highly infectious for up to two days before the onset of symptoms. Thus, face coverings are a crucial public health measure and help protect others by

reducing exposure to droplets if someone is unknowingly infected with COVID-19. Wearing a face covering, whether [or not] *you feel ill or have been diagnosed with COVID-19, is critical to maintaining everyone's health and safety.*

[F]ace coverings must be worn by everyone indoors *(including all faculty, staff, students, vendors and visitors) while you are on property owned or governed by MSU or while participating in MSU-related or MSU-sponsored activities. If you have a medical condition that may prevent you from safely wearing a face covering, you should contact* [MSU's Resource Center for Persons with Disabilities](#) *to begin the accommodation process.* From the APUE (8/20), individuals "must receive documents attesting to their exemption from the mask mandate before entering an MSU building without a mask."

Students should "refrain from eating or drinking during class to avoid having to remove their masks. If they do consume food or drinks inside, they should remove the mask only to take a sip of beverage or a bite to eat, and they must replace the mask properly between each bite and sip." (from the APUE (8/20/21)

Face coverings should:

1. *be non-medical grade to maintain supplies for health care use,*
2. *fit snugly against the side of your face,*
3. *cover your nose and mouth,*
4. *be secured with ties or ear loops,* ***and***
5. *allow for breathing without restriction.*

Cloth face coverings should only be worn for one day at a time, and they must be properly hand washed or laundered with soap/detergent before subsequent use. Face coverings may vary (for example, disposable non-medical masks are acceptable).

If you refuse to wear a mask even after being asked, you will be asked to leave the classroom for disruptive behavior. *Non-compliance with the mask requirement* [causing] *disruption in the classroom will result in the initiation of disciplinary action, which could lead to removal from the university.*

Self-Monitoring
Symptoms may appear 2-14 days after exposure to the virus. Using whichever tools and processes are made available by the university, pay attention for the appearance of possible flu-like symptoms, including:

- *Fever or chills*
- *Cough*
- *Shortness of breath or difficulty breathing*
- *Fatigue*
- *Muscle or body aches*
- *Headache*
- *New loss of taste or smell*

- *Sore throat*

- *Congestion or runny nose*

- *Nausea or vomiting*

- *Diarrhea*

This list may not include all possible symptoms. Public health officials, including the CDC, will continue to update the list as they learn more about COVID-19. If you begin exhibiting symptoms, stay home and contact the Olin Health Center's 24-hour nurse line at (517) 353-5557 or your personal health care provider.

<u>**Do not come to class if experiencing COVID symptoms!**</u>

Exposure
The best way to prevent illness is to avoid being exposed to the virus. If you believe you have been exposed to someone with COVID-19, you should self-quarantine and monitor your symptoms. If feeling ill, students should contact MSU's COVID-19 hotline at 855-958-2678 or contact their health care provider.

MSU will test any faculty, staff, or student who becomes symptomatic after returning to campus. You may also get tested through the State of Michigan Coronavirus Testing Hotline. Call (888) 535-6136 from 8 a.m. to 5 p.m., Monday through Friday, and press 1 to be connected to an operator who can help you find a nearby location and schedule an appointment. Or, visit Michigan.gov/CoronavirusTest to find locations near you. There are many locations where you can get tested at no cost.

Positive Test for COVID-19

"Anyone diagnosed with COVID-19 should isolate from others for at least 10 days after symptoms first appear <u>and</u> for 24 hours after fever has subsided without the use of fever-reducing medications <u>and</u> other related symptoms are improving. If you tested positive for COVID-19 but showed no symptoms, you should isolate for 10 days after your positive COVID-19 test." (from the APUE, 8/20/21)

Adherence to Public Health Guidance and Cooperation with Public Health Authorities
For the protection of the entire community, MSU expects all faculty, staff, and students to follow all applicable state and public health guidance and cooperate with public health authorities, including, but not limited to, participating in contact tracing efforts.

Adherence to Signage and Instructions
To protect yourself and others, faculty, staff, and students must (a) look for instructional signs posted by MSU or public health authorities, (b) observe instructions from MSU or public health authorities that are emailed to your "msu.edu" account, and (c) follow those instructions.

Compliance and reporting. Those who come to MSU facilities must commit to the personal responsibility necessary for us to remain as safe as possible, including following the specific guidelines outlined in this syllabus and provided by MSU more broadly (see below). There may be times when action will be necessary to reinforce expectations. If you do not wear appropriate face coverings (see MSU's guidelines), do not wear your face covering appropriately (i.e., over your mouth and nose), or do not adhere to physical distancing guidelines (i.e., six feet apart if

current guidelines deem necessary), you will be asked to correct the situation or leave the facility. In addition, MSU will utilize the processes already in place to respond to any issues of noncompliance with standards established for the health and safety of our community. For classroom disruptions or issues, the responses and processes that have been used previously remain the first line of action. If necessary, the student conduct system will be the avenue used to adjudicate student disciplinary situations.

For updated information. See https://msu.edu/together-we-will/keeping-spartans-safe/ for details about these new policies and procedures and see https://ehs.msu.edu/_assets/docs/fact-sheets/cloth-face-covering-fact-sheet.pdf for more details about the cloth face coverings guidelines.***

Learning Continuity Statement:

In the event you should require a prolonged absence due to illness, please be sure to adhere to the following expectations:

· Communication norms surrounding prolonged absences –

> I would expect that you contact your Instructor and TA with any known absence within 48 hours of your first missed lab session, including possible return (if known).

> Absences will only be granted for extenuating circumstances which includes requirement for quarantine due to COVID 19 illness.

· Assignment, homework, and groupwork expectations surrounding prolonged absences –

> **Only students that succumb to COVID-19 illness and either have been vaccinated or have a documented medical, RCPD, or religious exemption, will be provided the option of working on those lab activities missed during that time in a virtual environment. Virtual labs may NOT be considered a substitute for in person labs for any other situation, unless permission is given by the instructor of record.**

> If you are more than 2 lab activities behind in your coursework, we will have you pick up at the same point as the rest of the class upon return and we will work with you to make up a lab completion plan. If there is not enough time to complete these by the end of the semester, then we will work to complete at least 80% of the coursework and you would then be eligible for an Incomplete grade. A plan must be made to finish the course work by the middle of the following semester.

· Assessment accommodations surrounding prolonged absences

> These can be discussed with the instructor of record. Each situation will be different.

· Remote attendance options surrounding prolonged absences

If you have missed a number of sessions due to illness, we will work with you to determine the best plan forward to minimize loss of progress.

Course Continuity Statement:

· Course leadership & instruction in the absence of the primary instructor

In the event the Instructor or TA must be absent for a prolonged period of time, we will work to have a comparable substitute lead you each week in your lab sessions. If all instructional team members will be absent for a period of time, or a comparable substitute can not be located, all labs will IMMEDIATELY go to virtual format.

· Communication norms surrounding prolonged absences

You will be notified of any changes to the instructional team and/or instructional format within 24-48 hours of the next lab session.

· Feedback and grading expectations surrounding prolonged absences

In the event instructional team members are absent for prolonged periods of time, there may be delays in grading and feedback. You will be notified in the situation as to when you can expect your assignments to be graded in Kuracloud/D2L.

· Assessment modifications (if any) surrounding prolonged absences

A plan will be communicated in the event this occurs. Each assessment may require special consideration.

General Lab protocols and procedures

All documents for this course will be provided through access to D2L and Kuracloud Lt® (laboratory software) and registration in PSL 311L. You will be required to go through ALL pre-lab lectures and outside readings PRIOR to your laboratory session (up to 1-1.5 hours). Readings will include the PSL 311L tutorials, selected research articles, course notes, lectures and handouts. You may be required to **print** some procedures and data sheets to **bring with you** to lab (this is rare). Therefore, any printouts requiring special handling will be specified in D2L ahead of time.

Lab Safety Protocols

While our situation may be fluid we will be following the most CONSERVATIVE guidelines for personal protection during the semester. Therefore, we will be following either Health Care Professional Guidelines for PPE or MSU required guidelines for PPE. Whichever is the MOST STRICT will be the one that we follow. Regardless of all guidelines, we will be wearing masks AT ALL TIMES while in the lab and within 6 feet of each other. Be prepared for guidelines to change on a moment's notice.

Equipment and materials required for this course

 Kuracloud Lt access card - EVERYONE

ADI Kuracloud Access Code purchase link: You have 21 days after first log in to Kuracloud to purchase the following access code. Note: You can wait to purchase this until you get close to the 21 day limit.

https://transactions.sendowl.com/products/78388161/D5DC2E6E/view
$35.00 / 6 month access code + 6% processing fee totaling $37.10

A working **webcam** will be required for the Mid Term exam. There are a number of inexpensive options if you require an external webcam purchase. Please see instructor for options.

Attendance

Students are expected to attend all labs each week. You are not permitted to attend another lab section, unless specific permission has been given by the instructor of record or TA. Missing 2 or more lab sessions (aside from illness or emergency) will result in a "0" for the course regardless of the completion grade.

Missing a lab

If are unable to complete the lab during the lab topic week for one of the approved reasons below, you MUST contact your TA or Instructor at least 48 hours prior to your scheduled lab. Proper documentation may be required. (*See decision tree for late assignments and lab makeups in D2L).

Excuses that will require approval for lab/assignment makeups (*Documentation will be required).

1. Severe acute illness or injury*
2. Death in family* (see below)
3. Student athletes* (required events)
4. Medical or Graduate school interview* (2 granted per semester)
5. Professional conference presentations* (as required)
6. Observation of religious Holidays (as per MSU policy)
7. Unforeseen work related absence (1 per semester but it's a high bar to cross)

Things happen, computers crash, printers run out of ink, relationships break, weather stinks, other class assignments pop up, alarms don't always work, birthdays come every year, and pandemics are apparently inevitable. Please try to plan ahead as these are not acceptable excuses for missing labs or assignments.

Grief Absence Policy:
Grief Absence Policy Link
The goal of this policy is to provide a mechanism to standardize, monitor, and accommodate students who request temporary absence from a course, or special accommodations for a quiz or an exam as a result of loss or serious injury of a family member (parent, grandparent, sibling, spouse, or child). **Students are directed to notify the Assoc Dean of their college and**

document the reason for the grief absence, and the Assoc Dean in turn is charged with notifying the student's instructors that the bereavement event has been verified. Ultimately, it is the student's responsibility to make up any missed work.

Working with Partners

Partners will be assigned randomly and posted in D2L partner schedule each week. You will typically work with your assigned partners for up to 2 weeks (depending on the assignment). Failure to communicate with your partner and/or not contributing your fair share will result in a score of "0" for the uncooperative partner. I will not play arbitrator between partner disputes. Therefore any complaints received by myself, TA's or LA's will be deemed credible and will result in penalty with little to no arbitration. So please do not give your partner any reason to even communicate a lack of cooperation or communication to us because we will believe them.

No labs will be accepted if completed solely as an individual, unless that individual has been given permission due to approved absence or for other extenuating reason. Labs not completed with your assigned partner will be given a "0." In the gradebook.

Zoom Etiquette

Please be aware that how you conduct yourself during Zoom virtual classes, Zoom office hours, Zoom review sessions, creating Zoom videos, etc. should be done in a **professional** manner. This includes awareness of your surroundings, refraining from inappropriate language, discussing inappropriate topics, laying on one's bed or couch, or smoking/vaping. If any of these are witnessed, please know the host of the Zoom session has the right to remove that person from the session without warning.

PreLab Modules (110 pts)

These modules will be posted in our KuraCloud Lt site, and SHOULD be completed prior to the lab they correspond to. Due dates and times will be generically set weekly on Sundays at 11:59pm. There will often be more than one pre-lab learning module to complete, but the only one that is graded will say "Graded" in the title. Pre-Lab modules only have to be committed in Kuracloud.

Lab Assignments (11x40 pts each = 440 pts total)

Each week you will complete a laboratory exercise/assignment in small groups. They will often be in case study or clinical format as if you were performing many of the assessments on your patient/client. So acting professional is very important in these situations and will be taken into account for points each week. Each assignment must be submitted through our Kuracloud Lt platform and submitted via Assignment Folder in D2L **by 11:59pm on Sundays of the lab week. (See schedule for due dates)** Therefore, time management will be critical each week. No assignments will be accepted in hard copy or via email. Any late lab assignments will be deducted as per the grading rubric point structure or up to 10% per day (whichever is lower). Lab scores are based not only on **Correctness** of answers which includes appropriate use of key terms, but also **Completeness** of labs, **Teamwork** strategies, **Participation**, and **Time** management. Points can be deducted from *individual* scores within any of the above categories.

No lab assignments will be accepted > 1 week from **due** date unless there were extenuating circumstances as approved by Instructor of record or TA. LA's can not give this allowance.

Note: Even though lab activities will be committed in our Lt Kuracloud platform, they are officially scored in D2L. Failure to upload your pdf lab document in D2L or submitting into the wrong assignment folder will not nullify a late submission. All Labs are submitted through *TunrnItIn®.* So that you may keep track of your current status in the course, all assignment grades will visible in D2L gradebook within 1 week of submission date.

Any delay in posting of grades will be communicated to the students by TA or Instructor.

Post Lab Modules (13 x 5 pts each)

Each week during the semester, we will have post lab modules posted for you to do after the lab has completed. These are generally due about 1 week after the lab they are associated to has been completed and will have a common due date and time of Sundays @11:59pm. Most will be follow up reflection of the lab activities, a few case studies and the rest are professional growth discussion activities geared towards Pre-Healthcare Professionals. Once completed, you must "commit" the module for credit.

ArmChair MD/ or SimplB.io Project (50pts) (Complete one or the other NOT BOTH)

ArmChair MD project.

We are often exposed to a variety of media and television which often shapes our view of the medical world and even our own healthcare interests and expectations (Weaver et al. 2014). With this alternative project we will ask you to view up to 2 TV episodes of a major medical drama, and report on various professional aspects and physiological concepts you observe. In addition, we ask that you try to point out any misconceptions as well as scientific inaccuracies based on what you know from your recent studies. A separate document will be available in D2L corresponding to the specifics of this project.

Alternative project

SimplB.io Project

Find 2 research or clinical abstracts and "rewrite" them using plain language at the 9th grade level. By removing and/or simplifying science based jargon you will learn to communicate difficult scientific or clinical data in everyday terms. This is an **extremely** important skill to develop if you are going into a healthcare profession. You will gain valuable insight into how to communicate with patients who typically do not have the same level of understanding of science that you have. Separate instructions to follow.

Please note!

You may do one or the other project above. If you do both, we will randomly choose one to grade for the gradebook.

Professionalism/Self-Assessment (25pts)

As in all occupations, professionalism is imperative for a healthy working environment. Often in the Health Professions, how you are perceived by the patient or client can have economic

rewards or penalties. This does not mean you can't have fun or joke with your patient/client, but how you treat them and display yourself is often as important to your employer as how good a clinician you are. We will be implementing an overall professionalism assessment in conjunction with your own self-assessment this semester. You are being evaluated not only by yourself but also by your Instructors and your peers. Some assessment areas will include punctuality, teamwork, environment of care, hand hygiene, your demeanor towards our staff, and your level of preparation for labs.

Skills Assessment (50 pts)

Near the end of the semester, you will be asked to demonstrate in person your ability to measure blood pressure using the NHANES method or demonstrate **in person** your skills using a compound microscope. More specifics will be given later in the semester. You will be given some review materials prior to this demonstration. Missing assignment due dates will be counted as a late assignment and a 10% deduction charged if a late allowance is granted.

Mid-Term Exam (55 pts)

One required mid-term exam will be given using D2L and Respondus Lockdown browser with monitor during approximately the 8th week (see schedule) of the semester. Your instructor will elaborate on specifics, as we get closer. The exam will encompass ALL material up to and including labs from the week just prior to the exam. You will be given a review sheet up to 2 weeks prior to exam.

Final Exam (210 pts) (Two options this Fall!)

One final exam will be given during the last week of the semester using D2L and Respondus Lockdown browser with Monitor. Since many of you will be going into various healthcare fields, you will be required to take qualifying exams at some point. Therefore, this final exam will encompass laboratory material/concepts, readings, and lectures from the **entire** semester. We will begin reviewing up to 2 weeks ahead and will offer some outside study and review sessions when available (TBA).

Or

Final Assessment of your Learning Summative Report

You may opt instead of taking an final exam, to write a (minimum) 12 page, (maximum) 20 page summative evaluation of at least 80% of our learning objectives for this semester. This evaluation should include a detailed explanation of the major concepts for each weekly topic area including references and proper citation method. This will include answers questions related to the exam review sheet and discussions how you were able to meet each of the learning objectives for each topic area including specific learning moments and examples you experienced. Other specifics will be discussed at a later date.

Productivity

Effective teamwork requires that each person is contributing to the end result as equally as possible. As many of you will be required to be accountable for your productivity, we will begin to do so in each lab session. Each person in your team will be assigned one of two preparation

duties and along with your contributions during lab will determine productivity. Any person in the team that does not reach productivity for that lab session will be deducted 2 points for THAT *individual's* final lab grade for the week.

Participation in Lab Activities (not all pertain to remote option)

It is very important to your learning that you participate to the fullest each laboratory session. You will be asked to take part not only in noninvasive methods of data collection but also involving small finger sticks for blood samples on each other. If you should have any serious reservation or require a medical deferment, please see your Instructor to develop an alternative option to allow for full involvement as able. Some methods will also call for invasive procedures as performed by a professional on volunteers only. Techniques involving animal specimens (where appropriate) will require some skilled support from various learning assistants and student volunteers. You will **NOT** be required to participate in those procedures (without penalty) but you will nonetheless be required attend lab as a researcher/observer. Consequently, you are not relieved of any obligations for participating in data recording, quizzes, lab assignments, and discussion.

Appealing a lab submission grade

While we work to ensure accuracy and timeliness when grading your lab reports each week, there is always room for further discussion on your final grade assigned to each report. We HIGHLY encourage this discussion; we are requiring that you first go through the following process prior to initiating an appeal with your TA. 1. Grades and rubric codes should be available in Kuracloud and/or D2L gradebook within 1 week of student's submission. 2. Peruse your grade, feedback within Kuracloud, rubric codes and rubric. 3. Check the rubric codes (list of codes located in D2L) which indicates the general area where points were deducted. 4. Locate and research using our resource documents (also located in D2L) to identify 2-3 resources we've put together where you COULD have found the answers to the question. 5. While during your research, you still have a question about your submission, please approach your TA to discuss your answers. 6. If you still find our response to be inadequate, then contact the instructor to set up a day/time to meet with you and the TA to discuss your answers.

Confidentiality

You will be asked to collect and manage some sensitive data regarding yourself and your lab partners. In no way will this information be disseminated nor discussed outside of a laboratory context out of respect and confidentially for your lab colleagues. As in the "real" world, this would be a HIPAA violation. Here too this will be considered a "Breach of Confidentiality." Any first "breach" will be dealt without penalty but will require further education of the student at fault. A second "breach" will be dealt with more harshly at the Instructor's discretion from deduction of points up to and including dismissal from the laboratory.

Honors Option

*Email Instructor directly (zubekjoh@msu.edu) for updated options and instructions.

Plagiarism

Plagiarism is ALWAYS UNACCEPTABLE and will result in action taken against you. Please refer to the following links for further information:

MSU policy on plagiarism
MSU policy on academic dishonesty

Additionally: Any answers on lab assignments which are found to be extracted and plagiarized from previous lab students, websites (like quizlet etc.), whether correct or not will be given **0pts** on the offending questions for the first offense with education provided by instructor. Second offense will be given **0pts** for the entire assignment. Third offense is removal from the class with "grade to date" and an official notice of plagiarism submitted to the College of Natural Science.

Just so you know:

> We use *TurnItIn* to evaluate every lab submission in D2L.
>
> Any answer that does not "sound like you" or appears word for word with our unpublished model answers will be scrutinized further.
>
> > - In this situation, you will see rubric code "CT.2 Flagged (copying or potential plagiarism). See TA"
>
> ***Use our Citation Resource (located in D2L) to determine need for proper citation.***

Accommodations for Persons with Disabilities

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at rcpd.msu.edu. Once your eligibility for an accommodation has been determined, you will be issued a verified individual services accommodation ("VISA") form. Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (test, project, missed class etc).

Please take notice.
Any notice or presentation of a VISA "after the fact," will not be honored for that instance. For example, if your VISA mentions that you may have *"unexpected absences from classes,"* however this was not communicated to your instructor prior to the event, then the absence will not be granted for makeup. You MUST present any documented accommodations to your instructor so the appropriate assistance can be determined ahead of time. Bottom line is, I want you to be successful, but I will need the communication to begin as soon as possible.

Student Responsibilities and Policies

1. **Be on time for and attend all Mandatory Laboratory sessions.**
2. Read all assigned material and complete assignments before coming to Lab.
3. Retain copies (electronic and paper) of assignments/lab activities submitted during the semester till the end of the semester. Contests/disputes about scores received on assignments/activities will not be addressed without the original submission.
4. No assignments will be reviewed after 2 weeks of official grading AND publishing in gradebook. If you have items that you are concerned about for point purposes, this must be done with your TA/ULA first, then presented to the Instructor of Record if items cannot be

resolved. After 2 weeks, no point changes will be granted, unless submission has been omitted for some reason.

5. Set aside time daily to access the class D2L site and have a backup plan in event of computer malfunction.

6. Respect the other students and instructor by refraining from disruptive behavior, including turning off all communication devices (cell phones, tablets, etc.) during class. Any disruptive or unsafe behavior witness you will be asked to leave class and no credit will be given for that day's assignments.

7. Check e-mail and D2L for class related information including grades and inform the instructor of any discrepancies at the earliest.

8. Participate in all Lab activities with only prearranged exceptions as outlined above.

9. Know when you need help and ask for help.

10. You may not come late/leave early without proper communication and preapproval by the Instructor/TA/LA/ or Lab manager as points will be deducted up to no credit for that day's lab assignment.

11. Please refer to the following website for more specific [Student Code of Conduct](#) and judicial review.

Lab Day rules (via Zoom or other)

1. When Zooming in, please be aware of your surroundings behind you. While we highly encourage you to use video, we know that this can destabilize your connection. Therefore, use proper discretion when zooming.

2. No inappropriate or foul language will be tolerated while on Zoom.

3. Please refrain from eating during Zoom sessions.

4. Please refrain from laying on your couch, bed, our lounge chair during our Zoom sessions. This is highly unprofessional.

5. Please refrain from smoking or vaping during Zoom sessions. Highly distracting.

6. While the instructor, TA, or ULA is lecturing or providing instructions, please be sure to mute your microphone during this time.

7. Please be patient during our Virtual Zoom lab sessions. We know everything is more difficult and can be frustrating as this is not a normal mode of communication during a lab session. We will always do our best to resolve any problems you may have.

University Ombudsman

"The Office of the University Ombudsperson is available to assist students with any conflict or problem that has to do with being a student at Michigan State University. You may visit the Ombudsperson in 129 North Kedzie, call (517) 353-8830 or e-mail ombud@msu.edu. The Office of the University Ombudsperson is an independent, neutral, informal and confidential resource and does not accept formal complaints, nor does it provide notice to the University."

Reasonable time on task each week

You should be willing/able to spend up to 1-1.5 hours of pre lab preparation, 2-3 hours in lab, and 1-1.5 hours of follow up on assignments each week. Be prepared to spend about 5-5.5 hours on this class each week. Most students spend just shy of 5 hours/week when surveyed.

Recommendation Letter Policy

I am more than happy to assist you with a recommendation letter for your graduate school admittance, but do know there is only so much time and resources in my day to write letters for everyone. Here are a few requirements before I can consider writing you a letter of rec. (The fine print)

Step #1: Eligibility requirements

- You must have earned at minimum a **3.5 on the Final Exam AND 3.5 in PSL 311L course**. (Determined after final grades have been submitted).
- You must have perfect attendance according to the Attendance Policy in PSL 311L Syllabus.
- You must score near perfect on the Self-Evaluation/Professionalism assessment (≥24/25pts) at the end of the semester, and the score evaluated and agreed upon by the course instructors.
- You have consistently interacted with the instructional staff answering questions in class, and worked professionally within each of your assigned groups.
- Completed ALL assignments and labs.
- You must write 1 paragraph stating why you believe your performance in PSL 311L predicts your future success in graduate or professional school.
- Be absolutely sure that I would be the BEST person to write you a letter of Recommendation.

Step #2: If I am able to confirm your request, the following must be submitted/observed.

- **You must provide a resume and a rough draft personal statement.**
- **You will be asked to write a "mock" recommendation letter to send to me highlighting the areas you want me to focus on. Write it as if I were going to use the letter as is.**
- You may be asked to answer in writing a series of questions provided, in full, **prior** to my starting your letter. This is in addition to the above requirements and is at the discretion of the recommender.
- I would need at least 5 weeks' notice (preferably 7 weeks) prior to the due date of the letter.
- You must be willing to waive your right to view the letter prior to submission so that I may give an honest accounting of your abilities as observed, both quantitatively and qualitatively.

I have reserved 15 letter spots for students in Fall and Spring semesters each (30 total), and 8 spots for students in summer sessions. If those spots fill up, I may have to turn down your request gracefully. Note that each letter may require multiple hours of construction in order to give the recipient the best advantage possible.

Week of*	Prelab Topic Commit in Kuracloud Lt	Lab Topic Commit in Kuracloud Lt AND upload to D2L assignment folder (instructions to follow)	Assignment (Due dates) Post labs - Commit in KuraCloud Lt Other assignments upload to D2L assignment folder
Week 0 Sept. 1-2nd	Log in and register Kuracloud Lt from the invite email from your instructor. Review first day introduction video before class	**ADI Kuracloud Access Code purchase link:** You have 21 days after first log in to Kuracloud to purchase the following access code. https://transactions.sendowl.com/products/78388161/D5DC2E6E/view $35.00 / 6 month access code + 6% processing fee totaling $37.10	1. Get to know each other – in D2L – Discussions board. 2. D2L Quiz (in D2L assessments > Quizzes > D2L quiz) Due ASAP
Week 1 Sept. 8-9th	Lt Student Starter prelab activity* To be done on first lab day.	Introduction to Laboratory Equipment** (Due Sunday 9/12 @11:59pm)	*Initial Self-Assessment due Sunday Sept. 12th at 11:59pm ***** Upload to Assignment Folder in D2L* Post lab #1: Facts vs information (9/19 at 11:59pm)****
ALL labs will be completed with assigned partners. See link below for in person schedule, lab topics and partner lists. <u>Partner Assignment List</u>			
Week 2 Sept. 15-16th	Body Temperature Prelab* (due Sunday 9/19)	Body temperature Lab** (Due Sunday 9/19@ 11:59pm)	Post lab #2: Interprofessionalism (Due 9/26)****
Week 3 Sept. 22-23rd	Peripheral Nervous System Prelab* (Due 9/26)	Peripheral Nervous System Lab** (Due Sunday 9/26 @11:59pm)	Post lab #3: Mr. Blair (Due 10/3)****
Week 4 Sept. 29-30th	Somatic and Autonomic Reflexes Prelab* (Due 10/3)	Somatic and Autonomic Reflexes (Due Sunday 10/3)	Post lab #4: Ethics (Due 10/10)****
Week 5 Oct. 6-7th	Frog Muscle Prelab* (Due 10/10)	Frog Skeletal Muscle** (Due Sunday 10/10)	*Armchair MD/SimplB.io Project (Due 10/17) – in D2L Assignment folder****** Post lab #5: Frog Skeletal Muscle (Due 10/17) ****
Week 6 Oct. 13-14th	Hematology Prelab* (Due 10/17)	Hematology Lab** (Due Sunday 10/17)	Post lab #6: Hematology Case Study (Due 10/24) ****
Week 7 Oct. 20-21st	**No In person labs this week!**	**Available to take anytime Tuesday through Thursday of this week. Typical quiz time is 40-60 minutes.**	Post lab #7: Regulatory Compliance (Due 10/31)****

Week of*	Prelab Topic Commit in Kuracloud Lt	Lab Topic Commit in Kuracloud Lt AND upload to D2L assignment folder (instructions to follow)	Assignment (Due dates) Post labs - Commit in KuraCloud Lt Other assignments upload to D2L assignment folder
	Mid Term quiz		
Week 8 Oct. 27-28th	Heart and EKG Prelab * (Due 10/31)	Cardiac Physiology and EKG**(Due Sunday 10/31)	Post lab #8: Teamwork (Due 11/7)****
Week 9 Nov. 3-4th	Blood Pressure Prelab* (Due 11/7)	Blood Pressure** (Due Sunday 11/7)	Post lab #9: Blood Pressure (Due 11/14)****
Week 10 Nov. 10-11th	Lung Volumes Prelab* (Due 11/14)	Lung Volumes** (Due Sunday 11/14)	Post lab #10: Lung Volume (Due 11/21)****
Week 11 Nov. 17-18th	Kidney/Urinalysis Prelab* (Due 11/21)	Kidney/Urinalysis** Online for all (Due Sunday 11/21)	Post lab #11: Urinalysis (Due by 11/28)**** Skills assessment. Sign up for day/times (will be posted this week)
No Labs! Week of Nov. 24-25th	No Labs!	Thanksgiving week!	Eat Turkey!
Week 12 Dec. 1-2nd	Gastric Motility/Smooth Muscle Prelab* (Due 12/5)	Gastric motility/Smooth Muscle ** (Due Sunday 12/5/ @ 11:59pm)	Post lab #12: Career Path (Due by 12/12) ****
Week 13 Dec. 8-9th	No In person labs this week! Final Exam/ Skills assessment week	Final exam will be in D2L and will be opened on Tuesday Dec.7th at 8am, until Thursday Dec 9th at 11:59pm. You can take it anytime between those days/times. If you are choosing the alternative final, these will be due in D2L assignment folder on Thursday Thurs. Dec. 9th at 11:59pm.	Skills assessment. Come to lab for your demonstration at your designated day/time. Final Self-Assessment due Sunday Dec. 10th 1:59pm in D2L Assignment folder.*****

* code
*Prelabs will typically be available on Fridays prior to the lab topic it relates. Prelabs will be open for 1 full week and will be due on **Sundays at 11:59pm**. It is to your advantage to complete them prior to working on the lab activities.
** Commit lab reports in Kuracloud Lt AND submit pdf into D2L Assignment folder Labs must be completed the Sunday the same week as the lab activity assigned. All submissions will have a unique due date but all will be **Sundays at 11:59pm**.
****Post Lab Modules will be available on Fridays and also will have due dates of **Sundays at 11:59pm**.
*****Assignment **must be** Uploaded into designated D2L Assignment folder by date stated above.