

# NEU 311L: NEUROSCIENCE LABORATORY

## FALL 2024 SYLLABUS

### Course information

Location: Giltner Hall rm 268

Section 1: Mon 9:10am -12pm

Section 2: Mon 1-3:50pm

Section 3: Tues 9:10am-12pm

Section 4: Tues 1-3:50pm

Section 5: Wed 9:10am-12pm

Section 6: Wed 1-3:50pm

### Contact Information

#### Primary Course Instructors

**Cameron Prigge, Ph.D.**

(she/her)

[priggeca@msu.edu](mailto:priggeca@msu.edu)

"Prigga"

Dr. Prigge is the laboratory coordinator for all sections and instructs sections 5 and 6 of this course. She will also cover section 1 during weeks 3-7.

**Office Hours: Tues 2-4pm**

Office hours will take place in person or via Zoom:

Biomedical Physical Sciences Building

567 Wilson Road, Room 2205

Office phone: 517-884-5040

**Zoom link:** <https://msu.zoom.us/j/2806912862>

Meeting ID: 280 691 2862

**Byron Gipson, Ph.D.**

(he/him)

[gipsonby@msu.edu](mailto:gipsonby@msu.edu)

Dr. Gipson instructs sections 3 and 4 of this course. He will also cover section 2 during weeks 3-7.

**Office Hours: Wednesday 12-2pm**

Office hours will take place in person or via Zoom:

Biomedical Physical Sciences Building

567 Wilson Road, Room 2201K

**Zoom link:** <https://msu.zoom.us/j/96074619806>

Meeting ID: 960 7461 9806

**Charlotte Vanacker, Ph.D.**

(she/her)

[vanack40@msu.edu](mailto:vanack40@msu.edu)

Dr. Vanacker instructs sections 1 and 2 of this course.

**Office Hours: Thurs 1-3pm**

Office hours will take place in person or via Zoom:

Biomedical Physical Sciences Building

567 Wilson Road, Room 2201G  
Office phone: 517-884-5137

**Zoom link:** <https://msu.zoom.us/j/9459826115>  
Meeting ID: 945 982 6115

You may also schedule an appointment with your primary course instructor at a different time. **Please schedule appointments outside of standing office hours at least 24 hours in advance, in-person or via zoom.**

### Assistant Instructors

Assistant instructors are employees of MSU. They are graduates of MSU and have extensive knowledge of the course. They assess knowledge and provide guidance and feedback on assignments. **They are your primary contact for questions about assignments and grades.** Students find the one-on-one interactions with their assistant instructors valuable, and so you are encouraged to take advantage of their office hours. You may contact any AI for office hours.

You may also schedule an appointment with them at a different time. **Please schedule appointments outside of standing Zoom hours at least 24 hours in advance.**

<https://msu.zoom.us/j/94286433828>

Meeting ID: 942 8643 3828  
Passcode: NEU311L

**Elena Billard, B.S. (Sections 1 and 2)** (any) [billardk@msu.edu](mailto:billardk@msu.edu)  
"Ill-eena"  
**Office hours: Mon 5-7pm**

**Madison "Madie" Albers, B.S. (Sections 3 and 4)** (she/her) [albersm3@msu.edu](mailto:albersm3@msu.edu)  
**Office hours: Wed 3-5pm**

**Tanwir Hashem, M.S. (Section 6)** (she/her) [hashemta@msu.edu](mailto:hashemta@msu.edu)  
"Tan-weer Haa-shem"  
**Office hours: Thurs 4-6pm**

### Lab Technician

The lab technician is a graduate of the Neuroscience Program. They assist students by providing technical support, setting up laboratory exercises, creating some content, training members of the teaching team, and checking worksheets and skills assessments.

**Julia Podstolowicz, B.S. (all sections)** (they/she) [podstolo@msu.edu](mailto:podstolo@msu.edu)  
"Pohd-stoh-whoa-veech"

### Undergraduate Learning Assistants (LAs)

The learning assistants successfully completed NEU311L. They assist students during virtual worksheet help hours, verify completeness of submitted worksheets, occasionally provide feedback on worksheets, monitor discussion boards, screen TurnItIn reports, and verify that peer reviews are of acceptable quality. They are great resources for advice about strategies for success in NEU311L. You may contact any LA for help room hours.

**Help room hours:**

<https://msu.zoom.us/j/94286433828>

Meeting ID: 942 8643 3828  
Passcode: NEU311L

<b>Smayati Manam (section 1)</b>	(she/her)	<a href="mailto:manamsma@msu.edu">manamsma@msu.edu</a>	<b>Mon 1-2pm</b>
<b>McKenzie Kennedy (section 2)</b>	(she/her)	<a href="mailto:kenne567@msu.edu">kenne567@msu.edu</a>	<b>Mon 9-10am</b>
<b>Orla Young (section 3)</b>	(she/her)	<a href="mailto:youngorl@msu.edu">youngorl@msu.edu</a>	<b>Tues 1-2pm</b>
<b>Steffanie Joy Melan (section 4)</b>	(she/her)	<a href="mailto:joymelan@msu.edu">joymelan@msu.edu</a>	<b>Thurs 12:30-1:30pm</b>
<b>Kaveri Nambiar (section 6)</b>	(she/her)	<a href="mailto:nambiark@msu.edu">nambiark@msu.edu</a>	<b>Wed 8-9am</b>
<b>Leo Ramos Guzman</b>	(he/him)	<a href="mailto:ramosguz@msu.edu">ramosguz@msu.edu</a>	<b>Tues 12-1pm</b>

## Email Communication

Please reserve email communication for personal matters and urgent technical issues only. These include discussions about grades, accommodation letters, circumstances that hinder your performance in class, and missing or broken links in D2L and Eli Review. S

## Course Description

Overview of neuroscience research methodology, including experimental design, data analysis, and presentation of results. Topics include neurophysiological, anatomical, and behavioral investigations in crayfish, fruit flies, and humans. This is a writing-intensive course. Two credits.

## Learning Goals

### Faculty for Undergraduate Neuroscience Core Competencies

Members of the professional organization "Faculty for Undergraduate Neuroscience" identified a set of competencies that are important for individuals pursuing an undergraduate neuroscience degree to attain. Of these competencies, NEU311L focuses on the following:

### Critical/integrative thinking

- Read & analyze primary research papers
- Critique & develop experimental designs and methodology
- Integrate findings from diverse fields to address a research question or develop a testable hypothesis

### Basic neuroscience knowledge

- Cellular & molecular function of neurons (including how neurons communicate)
- Basic neuroanatomy
- Sensory & motor systems

### Scientific inquiry/research skills

- Develop a hypothesis & design experiments to test this hypothesis
- Collect, analyze, and interpret data

### Independent, self-motivated thinking

- Find answers to questions that may not be specifically addressed in a course
- Overcome barriers/impediments to learning/research

### Communication skills

- Present information orally in an organized and understandable manner
- Communicate scientific information in written format for scientific publication
- Communicate scientific information to the lay public

### Quantitative skills

- Analyze & interpret quantitative information, including graphs and statistics
- Quantitatively manipulate data & information
- Represent information in a quantitative format

From: Kerchner M, Hardwick JC, and Thornton JE. (2012) Identifying and Using 'Core Competencies' to Help Design and Assess Undergraduate Neuroscience Curricula. JUNE, 11:A27-A37.

## Prerequisites

NEU 301 (or concurrently) AND completion of Tier I writing requirement AND STT 201 (or STT 231 or STT 421) AND BS 171 (or BS 191H or LB 145). If a student was able to enroll without meeting these requirements, they will be dropped from

the course. If you find that you are not proficient in skills and concepts that are needed for you to succeed in this course, please express your concerns to an instructor. They will be happy to refer you to outside resources (e.g. from the writing center, tutors, peers, reputable internet resources, readings, etc.) in order to become fully prepared.

## **Recommended Background**

PSY 101

## **Administrative Drop for Non-Attendance**

Students who do not submit the first worksheet assignment within one week of the deadline will be dropped from the course.

## **Class Structure**

**IMPORTANT: STUDENTS ARE REQUIRED TO FOLLOW THE STANDARD PRACTICES THAT ARE DESCRIBED IN THE SLIDES, VIDEOS, AND DOCUMENTS ON D2L, AS WELL AS WITHIN ASSIGNMENTS. MANY OF THESE GUIDELINES ARE HIGHLIGHTED BELOW, BUT THESE OTHER DOCUMENTS AND VIDEOS GO INTO GREATER DETAIL AND PROVIDE SOME EXAMPLES FOR CERTAIN POINTS. THUS, YOU SHOULD FAMILIARIZE YOURSELF WITH THOSE DOCUMENTS AND REFER TO THEM REGULARLY THROUGHOUT THE SEMESTER.**

## **Desire2Learn (D2L) & Eli Review**

Course content, quizzes, some worksheet components, some homework submissions, grading, and course announcements are handled by the [D2L course site](#). Please set up your D2L profile and your notifications (email, mobile) so you receive announcements in a timely manner. You are responsible for checking to make sure that your grades for assignments have been entered correctly and that your quiz responses have been logged. You are required to participate in classroom discussions and peer review of homework assignments using the Eli Review website. All students are required to set up an Eli Review account. Instructions to do so will be provided later in the semester.

All assignments must be uploaded to the proper folder on D2L or Eli Review, otherwise you may be subject to the penalties described later in the syllabus. You are responsible for confirming that everything that you submit to D2L and Eli Review is successfully posted to the site by the specified due date and time on the schedule AND that all files are the correct versions and are not corrupted. Otherwise, you will not receive credit for the assignment.

**Students are not permitted to send files to one another to review.** If you upload a file that is highly similar to that of another student (even if it was unintentional), both students will receive a 0 grade for that assignment and will be issued an academic dishonesty report.

You are advised to take quizzes and upload documents at least one hour prior to the time they are due to allow time for D2L/Eli Review to process the submissions. You are also advised to read your peer and instructor feedback on each assignment soon after it is posted so that you may improve on future assignments. Assignments must be submitted in the format specified. No credit will be given for files submitted in other formats, corrupted files, or incorrect versions of a file (such as an earlier version or the incorrect assignment).

Eli Review join code:

## **Email Correspondence**

Emails may be sent directly to your MSU account or via D2L. You are required to utilize email communication for correspondence to and from the instructors outside of class. Make it a habit to check for emails from this class at least once every weekday. You should set up D2L emails and MSU emails to forward to the email address that you use most often. Check your junk mail as well to make sure you do not miss anything. Some students find that enabling mobile notifications help them remember to check their email. Please do not allow your MSU email inbox to become full and reject incoming mail.

Please allow 24 hours for a response from the instructors to an email sent Monday-Thursday and 48 hours for a response to an email sent Friday-Sunday. You are advised to complete your assignments soon after they are assigned so that you have time to contact your instructors with any questions you may have, receive their response, and make any necessary adjustments. Avoid waiting until the night before the assignment is due to contact them with questions, since they may not see your email in time.

Many students have claimed that they wrote an email and believed it was sent, only to see later that it was still in their outbox. Thus, make it a habit to confirm that any email that you intend to send is actually sent (i.e., is transferred from

your outbox to your sent mail folder) and use read receipts. Excuses related to unsent emails or emails sent to the wrong address are unacceptable.

Email communication must follow professional etiquette standards. They should not be pleading, demanding, or aggressive in tone. Those that do not meet these standards will receive a response requesting modification prior to receiving a response. Email responses from students are expected to be received within 48 hours.

## Course Materials

All lab protocols, assignments, readings, and background information will be provided on D2L, and Eli Review. You will be expected to look up and review certain topics for NEU311L, so your textbooks and notes from NEU301/302 and your statistics class will be extremely helpful for NEU311L. Here are some recommended websites and readings:

[Foundations of Neuroscience, Open Edition](#)

[Designing Neuroscience Experiments](#)

[FREE Brain Facts](#)

[MSU link to PubMed](#)

[FREE Data Science Textbook](#)

[FREE Online Stat Book](#)

## Computer/Internet/Software Requirements

You are required to have access to a laptop computer (not a tablet like an iPad and not a notebook-style computer like a Chromebook) with an up-to-date operating system, download capabilities, and reliable internet access. Instructions are provided for the Windows operating system. Students must use the FREE Office 365 Suite through MSU and download the desktop versions to their computers, since the web versions do not have all of the features needed for this course. Using alternatives (like Google Docs and open-source programs) and then converting to these file types is not advised. You may need to download LabChart Reader (free) to your computer. If you experience an issue regarding your access to either a working computer or the internet, you need to email your course instructor within 24 hours of the issue. These issues will be dealt with on a case-by-case basis.

## Technical Assistance

If you need technical assistance at any time during the course or to report a problem, you may:

- Visit the [MSU Tech Support Help Site](#)
- Visit the [Desire2Learn Help Site](#)
- Visit the [Eli Review Help Site](#)
- Call the MSU IT Service Desk at (517) 432-6200, (844) 678-6200, or e-mail at [ithelp@msu.edu](mailto:ithelp@msu.edu)

## Tier II Writing Requirement

An important part of one's professional development is to practice writing in their discipline and thus is required by MSU. NEU311L is the only neuroscience course to fulfill this requirement and does so by providing opportunities to engage in both formal and informal writing.

You will have some opportunities to read samples of writing from other students and offer suggestions for improvement. Writers will identify the peer suggestions that are most valuable (another important skill) and compose a revision plan that incorporates those suggestions. Instructors will provide coaching based on questions that writers submit within those revision plans, and then writers have the option to revise their assignments accordingly.

Please note that some graduate and professional skills have specific criteria to meet their upper-level writing criteria, and you are advised to contact them before applying to see if NEU311L meets their criteria or not. We are happy to provide further information for those schools if needed, but they may require applicants to take a different course in order to be considered for their program.

**\*\*\*Failure to submit all manuscript components will result in a grade reduction. See the Penalty Chart below.\*\*\***

## Course Schedule

A tentative course schedule for your section is provided on D2L. An accessible version of the schedule in the form of checklists are also provided on D2L.

Students are responsible for carefully consulting the schedule regularly, watching the videos and completing the assigned readings and the assignments by their specified dates and times.

If the schedule needs to be modified due to unforeseen circumstances, students will be alerted of changes via email to their MSU account or as a D2L announcement in a timely manner.

## Grading

We have found that grading on a points-based system better showcases student performance and growth. We wish to promote a focus on meeting set learning standards by earning points based on student performance. Thus, final grades will be determined by the accumulated points from sufficient, on-time submissions of homework assignments and weekly skills assessments. Submissions will be tracked in D2L. You should check the D2L gradebook at least once per week and/or whenever a new entry has been posted. The grading scheme is described thoroughly below.

Instructors are not able to predict the grade that each student will earn in this class prior to the completion of all assignments. Those individuals who follow instructions carefully, fully engage with the material, and turn in complete and correct assignments on time tend to do well in this course. Those individuals who have trouble with following directions, miss deadlines, and submit sloppy work do not tend to do well. If you start to struggle due to circumstances outside of your control, the best advice we can give is to communicate them to the instructors early and often.

A student can earn a particular grade in the course based on complete, correct, and on-time submissions for assessments in **all** categories listed in the final grading table below.

Assessment	Percentage
Pre-lab Quizzes (7)	10%
Worksheets (12)	10%
Experiment Homework (5)	15%
Manuscript Homework (5)	30%
Midterm (1)	10%
Skills Assessments (12)	10%
Final Cumulative Assessment (1)	15%
<b>Total</b>	<b>100%</b>

### Grading Scale

4.0 = 90% and above  
3.5 = 85%-89.9%  
3.0 = 80%-84.9%  
2.5 = 75%-79.9%  
2.0 = 70%-74.9%  
1.5 = 65%-69.9%  
1.0 = 60%-64.9%  
0 = below 60%

**Each missed class/worksheet that is not made up will result in a 5% reduction to your final grade in the course (see "Penalty Chart" below). You may only make up a worksheet from an excused absence. You must make up the worksheet within one week to receive credit. See "Participation and Excused Absences" below for list of excused absences and required documentation.**

### Pre-lab Quizzes (Total number = 7)

Videos of the background information, as well as occasional manuscripts, are posted to D2L for students to study one week prior to the actual experiment and worksheet for each weekly module. Allow at least one hour per week to review this background material, take notes, and take the associated quiz on D2L. Devoting attention to these videos and testing yourself with the quizzes is crucial for success in this class. You can earn a score of up to 100 on each of the quizzes. The quizzes make up 10% of your final grade. The weekly deadline for quizzes is **11:59**

**PM the evening prior to your scheduled class. IMPORTANT NOTE: If the quiz is not completed before lab, you will not be allowed to participate in the lab (see “Penalty Chart”).**

You will get **only one attempt** to take each multiple-choice quiz. Quizzes submitted/completed after the deadline but before class begins, will result in a 0 for that quiz but the student will be allowed to participate in the lab. It is recommended that you watch the videos and take the quiz in the 1-2 day period prior to attending class, otherwise you may find that you have forgotten the background material. If you choose to watch the videos and take the quiz earlier than that, be sure to take thorough notes and review them just prior to that week’s exercise. However, do not wait until the last minute to take the quiz due to the possibility of unanticipated events preventing you from completing the quiz on time. Closed captions are available for every video, and many students choose to turn them on while they watch the videos. You may choose to watch the videos at a slower or faster speed.

In addition to the background videos, there may be one or more pre-lab videos (not related to the quiz) to watch prior to class. Because we have limited time in class, it may be necessary for us to provide you with some additional information prior to class so that we may use our time together most efficiently.

### **Worksheets (Total number = 13)**

Completion of the worksheet associated with the in-class experiment/exercise every week is necessary to succeed in this class. Worksheets must be completed in-person and shown to an instructor by the end of the associated class. If you are unable to attend class due to an excusable reason, then you should contact your Course instructor to arrange to make up the missed class. **Each missed class/worksheet that is not made up will result in a 5% reduction to your final grade in the course. You may only make up a worksheet from an excused absence. You must make up the worksheet within one week to receive credit.**

Each individual is to fill out all portions of their own worksheet prior to checking their responses with an instructor and correcting their responses.

The protocol for each exercise indicates when to enter data into this worksheet. DO NOT ignore the protocol or worksheet instructions and simply guess how to obtain the data for the worksheet. Checkpoints in the worksheet indicate when you should check your work with an instructor before moving on. Each student is responsible for self-correcting their responses as needed and seeking out additional help from an instructor if they do not understand why their initial response was incorrect. Since the majority of acceptable responses are likely to be covered during the posted checkpoints, each student is required to have a final worksheet that is complete and accurate in every way. While the instructional team will be checking each submission for completeness and may comment on some items, they are not expected to check for accuracy of all items in the worksheet. You can earn a score of up to 100 on each of the worksheet assignments. Completion of the worksheets counts for 10% of your final grade. You are expected to use the information that you compiled in the worksheet to set you up for success on your skills assessments, homework, and the student-designed project.

You may be required to upload a file to a D2L dropbox as part of your worksheet.

### **Homework Assignments (Total number = 10)**

Most labs have an associated homework assignment that is due on the day of the following class. A homework assignment may have several components. It is important to carefully read the instructions for each assignment posted on D2L. Typically, there will be a writing component that is due to an assignment dropbox on D2L, but there may be another task to complete as well. You should plan to spend **one hour or more each week** working on the homework. It is expected that students will reference the worksheet that they completed (and corrected) from the in-class exercise in order to complete this homework. If you did not complete this information, then you will not be able to complete the portion of the homework that depends on that information. If a student misses a worksheet due to an unexcused absence or does not fully complete that week’s worksheet, they may still complete the portion of that week’s homework that does not depend on the data collected or analyzed that week within their initial deadline (no extension allowed on homework for missed lab). The formatting of graphs, legends, references, etc. must follow the guidelines provided on D2L, so be sure to refer to the relevant resources provided to you, which are also posted on D2L. See the other sections of this syllabus and the first day videos for more details.

Please see the grading table above regarding requirements for each final grade in this course. You can earn a score of up to 100 on each of the homework assignments. Homework assignments based on experiments earlier in the semester (up to the midterm) count for 15% of your final grade. Homework assignments based on completion of the research project manuscript (Tier II writing requirement) count for 30% of your final grade. Your assistant instructor will complete the detailed grading rubric on D2L for any homework submission, and students are expected to review those completed rubrics in a timely fashion. Homework submissions from experiments are due to D2L by 11:59 PM one week after the class related to that homework was assigned. Manuscript homework submissions will be explained in class.

### **Late Passes**

Assignments must be turned in on time to receive credit. Make it a habit to double-check that you submitted the correct document to D2L prior to the deadline. Typically, assignments are graded several days after a due date, so if you wait to receive an alert of zero points for a grade entered one week after the deadline, it will be too late to receive any credit for it.

The exception to this policy is that each student is granted **three** assignment extensions:

- Two 24-hour extensions
- One 1-week extension
- These extensions may only be used for homework assignments.
- When you upload/submit the assignment to D2L, you must add a note that states “Using one of my (24-hour or 1-week) free extensions”.
- You are required to send your assistant instructor an email telling them when you have completed a late assignment so that they are aware that it is ready to grade.
- You are advised to save extensions for an unanticipated event that prevents you from submitting on time.
- You may not take back a previously used free extension to use on a new assignment.
- Keep in mind that submitting a late assignment using a 1-week late pass also means that you will lose the opportunity to participate in peer review and resubmit (see “Penalty Chart”).

### **Peer review and revision**

Peer review and revision will be used for the project manuscript homework assignments. You are **required** to participate in the peer review process and to upload your written homework assignment to the correct D2L dropbox by the first date listed for that assignment in your schedule. Failure to participate in peer review will result in a deduction of 45% on that assignment. You will be placed in a review group within the next two days of the due date. You will then have one week to review your peer’s writing. The final, revised version of the file submitted to D2L for this required deadline is the one that will be graded.

Many students find that the effort they put into peer review is well worth the impact it has on the quality of a particular writing assignment.

Following peer review, you will have the opportunity to revise and resubmit the assignment. You must ALSO upload the document to the correct assignment dropbox on Eli Review (codes and instruction will be given separately on D2L) by the time when the original submission is due. Depending on the number of students in your section, you will usually have two or three documents to peer review. Reviews must be completed in Eli Review by 11:59 PM the following week.

**IMPORTANT NOTE:** Each student is **REQUIRED** to complete ALL reviews by the due date. If a student fails to complete all of the reviews for TWO assignments, their final grade in the course will be reduced by 5%. For example, a student misses one of three assigned reviews during Project Methods and one of three assigned reviews during Project Results. If their final calculated grade in the course was an 85%, it will be dropped to 80% for missing those reviews. If a student fails to complete all of the reviews for three or more assignments, their final grade in the course will be reduced by 10% (ex. if they would have earned an 85%, they will instead receive a 75%). Individuals who do not submit effortful peer reviews (e.g., by failing to catch obvious errors or simply commenting “great job” rather than providing specific advice) or miss peer reviews for 1 or more assignments will be subject to a grade penalty. EVERYONE MUST COMMIT TO THE PEER REVIEW PROCESS AND HAVE THE TIME AND FOCUS TO COMPLETE THEIR PEER REVIEWS ON TIME. IT IS UNFAIR TO OTHERS TO SPEND TIME REVIEWING YOUR DOCUMENT AND NOT RECEIVE AN EFFORTFUL REVIEW IN RETURN! 😊



Next, you are expected to read the peer reviews and assess whether they are valuable. Many students find it useful to create a "Revision Plan" in Eli Review. This is an optional step that will allow you to get feedback from the assistant instructor. You may mark the feedback you plan to use and write ideas for yourself. This is also the appropriate place to pose **specific questions** about your writing to your assistant instructor. Responding to revision plans is their highest priority. If you want to complete a revision plan, it must be submitted by Thursday evening following the completion of peer reviews (see the schedule for details). Your assistant instructor will respond to questions in your revision plan Friday morning. This is in an effort to encourage all students to improve their writing.

Finally, you may revise your writing. The final version of the manuscript (for all students, whether you did or did not do a revision plan) must be submitted to the final version dropbox on D2L two weeks after the original document (1<sup>st</sup> draft) due date. If you do not submit a revised version, then your document adjusted from peer review suggestions should be submitted. You will still have the opportunity to resubmit the assignment if you accidentally forgot to complete your peer reviews. You may not revise and have your new submission graded in place of your original submission if you: 1) Do not upload the original submission to D2L by the deadline; 2) Do not upload to Eli Review by the deadline; or 3) Do not upload the revised version to D2L by the deadline.

### **Skills Assessment (Total number = 12)**

Students will complete a weekly skills assessment in class. The skills assessments focus on the core competencies listed on the second page of this syllabus. Skills may be assessed as part of the experiment/exercise performed in class, as written-response questions, as oral questions, or as lab practical-style challenges. The quizzes, worksheets, and homework are meant to prepare you for these assessments. You can earn a score of up to 100 on each of the skills assessments. Skills assessments count for 10% of your final grade. On occasion, the instructors may opt to offer limited opportunities to re-attempt certain questions/skills for half credit.

### **Midterm Cumulative Assessment (Total number = 1)**

The midterm cumulative assessment focuses on material covered in the lab up until the midterm. The quizzes, worksheets, skills assessments, and homework are meant to prepare you for this assessment. You can earn a score of up to 100 on the midterm cumulative assessment. This assessment is worth 10% of your final grade. The instructors may opt to offer limited opportunities to re-attempt certain questions/skills for half credit.

### **Final Cumulative Assessment (Total number = 1)**

The final cumulative assessment focused on material covered in the lab over the entire semester. The quizzes, worksheets, skills assessments, and homework are meant to prepare you for this assessment. You can earn a score of up to 100 on the midterm cumulative assessment. This assessment is worth 15% of your final grade. For the final cumulative assessment there will be no opportunities to re-attempt certain questions/skills for partial credit.

### **Research Projects**

Students will attempt to replicate a published peer-reviewed experiment related to a previous lab exercise. Since this project builds on the classes and homework leading up to the project, it is of utmost importance that each student has had exposure and practice in the topic areas.

## Penalty Chart

Grade Item Action	Grade consequences
<p><b>Quizzes</b></p> <ol style="list-style-type: none"> <li>No quiz submitted</li> <li>Late quiz submitted</li> </ol>	<ol style="list-style-type: none"> <li>0 grade on quiz AND no lab entry AND no credit on worksheet and skills assessment for that lab (0 grade for each)</li> <li>0 grade on quiz AND can attend lab AND able to get full credit on worksheet and skills assessment for that lab</li> </ol>
<p><b>Manuscripts</b></p> <p>Eli Review:</p> <ol style="list-style-type: none"> <li>Assignment for peer review not submitted/uploaded (can't participate in peer review)</li> <li>Each incomplete or non-effortful review</li> <li>Failure to complete all reviews for two assignments</li> <li>Failure to complete all reviews for three or more assignments</li> </ol> <p>Missing components of manuscript:</p> <ol style="list-style-type: none"> <li>Failure to complete Literature Review, Introduction, Methods, Results, and/or Discussion</li> </ol>	<ol style="list-style-type: none"> <li>-45% deducted from that assignment grade</li> <li>-15% deducted from that assignment grade</li> <li>-5% off final grade in the course</li> <li>-10% off final grade in the course</li> <li>0 grade for each assignment not completed AND -5% off final grade in the course for each assignment not completed</li> </ol>
<p><b>Lab attendance</b></p> <ol style="list-style-type: none"> <li>Unexcused absence (see accepted excuses under Participation and Excused Absences)</li> </ol>	<ol style="list-style-type: none"> <li>0 grade for worksheet and skills assessment for that lab AND -5% off final grade in the course for EACH unexcused absence</li> </ol>

## Contesting grades

Students are expected to review their feedback for quizzes, worksheets, and homework assignments on D2L before bringing their concerns to the instructional team. Honestly self-assess whether you perhaps misunderstood or overlooked something, and if that mistake led to the deduction. You are encouraged to contact members of the teaching team to help clarify misunderstandings of the material. If a genuine grading error has been made (such as a missed score for part of the rubric), it would be appropriate to email or attend Zoom office hours with your assistant instructor to discuss your concern. However, we will not re-grade individual elements of the assignment.

If you believe that the grade you received did not reflect the overall quality of the assignment, you are required to communicate with your assistant instructor (your registered section) in order to allow them to clarify why any area was determined to be unsatisfactory. After that, you may formally request a re-grade of the entire assignment by your primary course instructor within 7 days that the grade was posted to D2L. Please email your course instructor (CC your assistant instructor) stating as such, and that you understand the new grade will stand. It may be better, worse, or the same as your initial grade. Please do not attempt to bargain or negotiate for a higher grade. If you have a genuine concern that you are consistently receiving unfair grades on writing assignments, please send an email that describes your evidence in detail to your course instructor, and they will attempt to rectify the situation.

## **Inclusivity**

This course will be conducted in an atmosphere of mutual respect and affirms people of all gender expressions and identities. The instructors were provided with a class roster with your name as you provided it to MSU. However, if you prefer to be called a different name than what is on the roster, please let your course instructor know. You are also invited to share your pronouns.

## **Professional conduct and appropriate netiquette**

Be professional in your communications. Interact with your fellow classmates and instructor as you would in your professional life. Use appropriate language and grammar. Be clear and concise. Have opinions but be respectful of disagreement. Be cautious with humor or sarcasm. It is not that we want to create a dull environment devoid of fun, but it is quite easy for these tones to be lost in text. If you want to make jokes or be sarcastic, indicate your intent with emoticons or a sarcasm tag "/s". Please be kind and respectful.

If necessary, the instructors will complete a professional conduct assessment form for students who do not follow these guidelines and provide feedback about conduct in these areas. If a student receives a professional conduct assessment, they will be assessed again at the end of the semester. **If they are not rated as satisfactory in all categories in the final assessment, then their final grade in the class will be reduced by 10%.**

## **Participation and Excused Absences**

Students are required to complete all worksheets in their entirety. Excused extensions (beyond the three free extensions described above) on homework may potentially be arranged for the following excuses, and then only if the student follows the procedures outlined for communicating and documenting that particular excuse as outlined below. For excused extensions, an instructor will email you the revised due dates for any associated assignments.

If a student does not meet the requirements for an excused absence, then a student will need to use a "late pass." If the student has already used all of their "late passes," then the late assignments will not be permitted. Students with an unexcused absence (or who do not use a late pass) will receive a 0 for the associated worksheet. Modules are open for at least 6 days prior to due dates in order for students to be given more than enough time to work on the components at times convenient for them. Students are highly encouraged to complete assignments well ahead of their due dates so that there is sufficient time to post questions to instructors and to allow for unanticipated events.

This policy is in effect from the first day of the semester. The instructors reserve the right to provide exceptions to the policies on an individual basis.

In most circumstances, make-up labs will not be offered for excused absences, but instead an online version of the experiment/exercise will be substituted for the in-class experience. For planned excused absences (with proper documentation), you may have the opportunity to participate in an in-person lab on another day/time -- please communicate with your instructor well in advance to possibly have this option. Once you have contacted your course instructor and sent the appropriate documentation, an instructor will respond to you via email to schedule revised due dates. You must respond to this email within 24 hours to verify that you received the email and have noted your revised due dates. Depending on the assignment and submission date, the students may need to forfeit their participation in the related peer review tasks.

## **Illness or injury**

1. **DO NOT ATTEND CLASS IF YOU HAVE COVID-LIKE SYMPTOMS OR HAVE HAD CLOSE CONTACT WITH SOMEONE WHO HAS COVID-LIKE SYMPTOMS.** If you are ill or must care for someone who is ill, you must email Your course instructor prior to class to tell them that you will be unable to make it to class. Check your sent mailbox to verify that the email was actually sent and indicate that you would like a delivery receipt.

## **Bereavement due to death in the family or similar tragedy**

1. You must email Your course instructor prior to class to tell them that you will be unable to attend class. Check your sent mailbox to verify that the email was actually sent and indicate that you would like a delivery receipt.
2. Within 14 days of the requested excuse, your course instructor ALSO needs to receive an email notice from the Dean's office indicating that you have been approved for a grief absence. In order to request a grief absence, you must fill the [Grief Absence Request Form](#) within 7 days of the event and provide the requested documentation. The following information regarding the Grief Absence Policy was taken directly from the [University](#).

“The faculty and staff should be sensitive to and accommodate the bereavement process of a student who has lost a family member or who is experiencing emotional distress from a similar tragedy so that the student is not academically disadvantaged in their classes or other academic work (e.g., research). For undergraduate and master’s (Plan B) students without research responsibilities, it is the responsibility of the student to: a) notify the Associate Dean or designee of their college of the need for a grief absence in a timely manner, but no later than one week from the student’s initial knowledge of the situation, b) provide appropriate verification of the grief absence as specified by the Associate Dean, and c) complete all missed work as determined in consultation with the course instructor. It is the responsibility of the Associate Dean or designee to: a) determine with the student the expected period of absence – it is expected that some bereavement processes may be more extensive than others depending on individual circumstances, b) notify the faculty that the student will be absent, and c) receive verification of the authenticity of a grief absence request upon the student’s return. It is the responsibility of the course instructor to work with the student to make reasonable accommodations and to include appropriate language describing such accommodations in their course syllabus, so that the student is not penalized due to a verified grief absence.”

### **Interview for post-baccalaureate education (including medical school, graduate school, etc.) or job**

1. You must email your course instructor to tell them that you will be unable to attend class at least seven days prior to the missed class. Check your sent mailbox to verify that the email was actually sent and indicate that you would like a delivery receipt.
2. At the same time, you must also forward your course instructor the invitation letter for the interview that states your name, the name and location of the program or job, the contact person, and the date and time of the interview. Open houses or interviews for jobs that will be held while pursuing your undergraduate degree will not be excused.

### **Presenting at a professional scientific conference**

1. You must email your course instructor to tell them that you will be unable to attend class at least seven days prior to the missed class. Check your sent mailbox to verify that the email was actually sent and indicate that you would like a delivery receipt.
2. You must also forward your course instructor the verification for that you received from the society running the conference for submitting your abstract for presentation, the abstract itself with your name listed as the first author, the name and location of the conference, and the date and time of the conference.

### **Court date or jury duty**

1. You must email your course instructor to tell them that you will be unable to attend class at least seven days prior to the missed class. Check your sent mailbox to verify that the email was actually sent and indicate that you would like a delivery receipt.
2. You must ALSO email your course instructor a copy of the notice from the court that states the date and time that you are expected to be present in court.

### **Observation of religious holidays**

1. You must email your course instructor to tell them that you will be unable to attend class at least two weeks prior to the conflict. Check your sent mailbox to verify that the email was actually sent and indicate that you would like a delivery receipt. It is the responsibility of the student to make arrangements in advance with their instructors and to catch up on any material discussed and assignments given during that class period. Accommodations must never fundamentally alter an essential requirement of the course or academic program. Absences due to observance of religious holidays do not require the use of Late Passes.

### **Chronic health issues, physical disabilities, and learning disabilities**

If you experience severe and chronic health issues, physical disabilities, or learning challenges that prevent you from completing assignments by the deadlines, we can attempt to devise a plan to help support you!

1. Within seven days of the first day of class (if you were diagnosed prior to the start of the semester) or within seven days of diagnosis (if you were diagnosed during the semester), you must provide your course instructor with an [Accommodation Letter](#) issued by the RCPD. The instructors are TREMENDOUSLY willing and able to provide accommodations for students who need them, but an Accommodation Letter is required in order to do so. Information regarding an Accommodation Letter is kept confidential to the instructors and the teaching assistant, and you will not be asked to provide personal health information related to the diagnosis. **Students eligible for an Accommodation Letter are HIGHLY encouraged to obtain one and provide it to your course instructor as soon as possible.** If you have applied for an Accommodation Letter but it has not yet been issued, please inform your course instructor, and provide them with the name of your RCPD advisor.

Note: A new Accommodation Letter must be provided every semester. Even if you have provided your course instructor with an Accommodation Letter for a previous course, you must provide a copy to your course instructor for NEU311L.

## Appointments

If a Zoom or face-to-face meeting is scheduled with a member of the teaching team (which includes an instructor, an assistant instructor, the technician, or an LA), you are expected to attend that appointment at the agreed upon time. Otherwise, your final grade will be dropped one grade level for each appointment missed.

## Living organisms

Living crayfish and *Drosophila* (fruit flies) are used in our class so that you may observe nervous system activity. Sheep brains and plastinated human and animal brains will also be shown during our study of neuroanatomy. Please let your course instructor know during the first week of class if you have personal objections to handling these specimens.

## Academic Integrity

The “Academic Freedom for Students at Michigan State University” document (found at <http://splife.studentlife.msu.edu>) is a legal document that you, as a member of the MSU community, should be familiar with. The welcome letter at the beginning reads, in part:

“As an academic community, it is necessary to set standards that will promote an environment conducive to learning. The first part of Spartan Life presents the policies, regulations and guidelines developed to provide an atmosphere that furthers opportunities for intellectual and personal development while protecting individual freedoms. As a student you are encouraged to exercise your rights and you are expected to meet your responsibility to adhere to the standards set. The second part of this guide serves to inform you of the rules, regulations, rights, and responsibilities that have been established in the interest of all members of the University community.”

Academic misconduct, including but not limited to, plagiarizing, cheating, and submitting falsified data will not be tolerated in this course. Individual student assignments that contain portions that are deemed by your course instructor to be highly similar to an assignment submitted by another student in current or previous semesters or to an internet or published source may be considered a violation of academic integrity. See [Section 1.00 PROTECTION OF SCHOLARSHIP AND GRADES](#) and [Student Academic Integrity FAQs](#) for detailed informed about definitions of academic integrity, examples of misconduct, and advice about how to avoid it.

For this class, you are not to work with another person on your assignments unless explicitly instructed to do so by your course instructor. You are not allowed to obtain assignments from another student enrolled in the current or a previous semester. All data, ideas, and answers must be original to you. When required to use information from published papers or other sources, it must be re-stated in your own words and cited as specified in class. Do not work on quizzes or writing assignments side-by-side with others, provide or obtain quiz answers from others, give or discuss your documents to others, or receive documents from others. You are not allowed to work together on shared documents, to pay another individual to complete your work in part or as a whole, or to obtain assessment-related information from sites such as Chegg or Course Hero. Please be mindful of using AI-generated text for your assignments (e.g. Grammarly). TurnItIn will give an alert if your writing appears to be AI-generated.

Suspected violations of the MSU policies will result in a meeting with your course instructor and your assistant instructor. Depending on the severity of the violation, penalties for academic dishonesty may range from 0 points for an item on the assignment, to a 0 grade for the entire assignment, to a failing grade for the class. If a penalty grade is administered, your course instructor is required to submit an [academic dishonesty report](#) to the university, which will be added to the student’s record. The student will be required to complete a course on academic integrity and the Dean may choose to impose other sanctions.

Providing your completed assignments, answers to quiz questions, answers to exam questions, etc. to other students currently enrolled in NEU311L or those who may take NEU311L in the future is considered a violation of academic integrity and may subject you to sanctions by the university even if you are no longer enrolled in the class. Unfortunately, students have retroactively failed the course for this reason and were

As future professional scientists, students are expected to abide by the [Society for Neuroscience Ethics Policy](#) as well.

## TurnItIn

TurnItIn dropboxes are used for all assignments in this course. "Consistent with MSU's efforts to enhance student learning, foster honesty, and maintain integrity in our academic processes, instructors may use a tool called Turnitin to compare a student's work with multiple sources. The tool compares each student's work with an extensive database of prior publications and papers, providing links to possible matches and a 'similarity score.' The tool also has an AI indicator that shows the overall percentage of the document that was AI generated. The tool does not determine whether plagiarism has occurred or not. Instead, the instructor must make a complete assessment and judge the originality of the student's work. All submissions to this course may be checked using this tool. Students should submit papers to Turnitin Dropboxes without identifying information included in the paper (e.g., name or student number), the system will automatically show this info to faculty in your course when viewing the submission, but the information will not be retained by Turnitin. Student submissions will be retained only in the MSU repository hosted by Turnitin."

Students may also consult the similarity report generated by TurnItIn and may resubmit assignments prior to their due date. The TurnItIn report may be confusing for students to interpret since a high similarity score may simply reflect that other students are submitting documents that contain the same instructions. Thus, you are welcome to attend office hours if you wish to have assistance in interpreting any TurnItIn report.

## Mandatory reporting

"Michigan State University is committed to fostering a culture of caring and respect that is free of relationship violence and sexual misconduct, and to ensuring that all affected individuals have access to services. For information on reporting options, confidential advocacy and support resources, university policies and procedures, or how to make a difference on campus, visit the Title IX website at [www.titleix.msu.edu](http://www.titleix.msu.edu)."

## Limits to Confidentiality

"Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues based on external legal obligations or that relate to the health and safety of MSU community members and others. As the instructor,

I must report the following information to other University offices if you share it with me:

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child,
- Allegations of sexual assault or sexual harassment when they involve MSU students, faculty, or staff, and
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. If you would like to talk about these events in a more confidential setting you are encouraged to make an appointment with the MSU Counseling Center."

## **Letters of Recommendation**

The course instructor will consider providing letters of recommendation for professional and graduate schools, internships, and jobs to those students who exhibit respect for instructors, demonstrate enthusiasm and integrity, regularly exceed expectations on assignments, and have a 3.0 or greater overall GPA. An email request for a letter of recommendation should be made at least one month in advance of the deadline. Your resume, your transcript, your personal statement, an explanation about how your performance in NEU311L demonstrated leadership and potential to succeed in the career path of your choosing, and a list of schools, their due dates, methods of submission along with the emails from schools detailing any online submission procedures, must be provided at least two weeks prior to the due date of the first submission. Please also state the semester you took the class and the section you were enrolled in.