



Department of Physiology

Frontiers in Physiology PSL 101 – Spring 2025 Syllabus

Credit Hours: 1

Course Modality: Online, asynchronous

Course meeting days and time: Students may work on the course materials at any time of the day. However, the course is not self-paced. Students are expected to meet weekly deadlines. Each week of the course runs from Wednesday to Wednesday. Lecture videos and assignments are posted by Wednesday evening, and assignments are due the following Monday (at 5 PM) and Wednesday (at 5 PM).

Course location: All lecture videos and assignments will be posted on D2L. The direct link to the PSL 101 D2L page is <https://d2l.msu.edu/d2l/home/2126077>.

1. Instructor

Dr. Lori Seischab (she/her/hers)

Appointments:	You may use the advising appointment scheduling system to book an in-person appointment related to PSL 101. Go to http://student.msu.edu .
Drop-in office hours:	In addition to scheduled appointments, you may attend my drop-in office hours in-person or on Zoom. The drop-in office hours are most Mondays, 10:00 AM – 11:00 AM . To attend office hours, stop by 2240 Biomedical Physical Sciences building or go to my Zoom Personal Meeting Room (https://msu.zoom.us/j/3489538947). When you click on the link, you will enter my virtual waiting room. When I am done with the previous student, I will let you into my Zoom room. I will not hold office hours on January 13 (1 st day of semester), January 20 (MLK Day), March 3 (Spring break), and April 14.
E-mail:	Seischab@msu.edu E-mail is my preferred means of communication. Please put “PSL 101” in the subject line. That helps me scan my crowded inbox to find messages from my PSL 101 students. Please allow at least 1 business day for me to respond.
Phone:	(517)884-5200

2. Course Information

2A. Course Description:

Most PSL courses explore the **core concepts** of physiology, including homeostasis, cell membrane, cell-cell communication, interdependence, flow down gradients, energy, and structure/function. In contrast, this course

explores the **professional skills** of physiologists, including teamwork, communication, cultural humility, and navigating conflicts. Through weekly reflective writing assignments, you will explore the connections between your co-curricular experiences and the skills that employers and admissions committees expect you to have.

Reflective writing is a key part of the course. Why? Well, medical education research has shown a relationship between reflection and professionalism (Hoffman et. al, 2016). You will be writing to learn about **yourself, your** goals, and **your** progress towards those goals. Whether you want to be a physician, physician assistant, dentist, medical writer, researcher, medical device sales rep, data analyst, healthcare administrator, etc., I want you to have the professional skills you need to achieve your career goals.

Since you will be writing to learn about yourself, the use of artificial intelligence (ex. ChatGPT) is not appropriate in this course. All essays and assignments must be created by you, without the aid of artificial intelligence.

Reference: [Hoffman LA, Shew RL, Vu TR, Brokaw JJ, Frankel RM. Is Reflective Ability Associated With Professionalism Lapses During Medical School? Academic Medicine. 2016 Jun;91\(6\):853-7.](#)

2B. Course Overview:

When I designed this course, I had several broad goals in mind. By the end of the semester, I want students to be able to

- compare career paths in physiology and the skills necessary for success in those paths,
- develop a plan for acquiring those skills, and
- evaluate their progress towards their career goals.

To meet those goals, I have designed course activities that mimic things you will do as a working professional and/or as a successful applicant to a professional school. In particular, we will focus on the skills that are important for careers in health and science.

Lecture videos

On Wednesday evenings, I will post 1-4 lecture videos for the week. Basically, I have taken the typical 50-minute lecture and broken it into shorter, more manageable segments. While watching the videos, you will stop at various points to work on the Lecture Assignment.

Lecture Assignments (Each lecture assignment is worth 100 points)

The Lecture Assignments will help you engage with and better understand the lecture content. There will be one Lecture Assignment per week, not one per video. The instructions for the Lecture Assignments are embedded in the lecture videos. Often, you will need to watch all the videos for the week to complete the Lecture Assignment. Most weeks, the Lecture Assignment will be **due on Monday at 5 PM**, unless Monday is a holiday or break. For example, the first Lecture Assignment will be due on Tuesday January 21 at 5 PM, because Monday January 20 is MLK Day.

Lecture Assignments are *not* graded on accuracy. Listing an incorrect answer is OK because we learn by recognizing our mistakes. If you follow directions and complete the entire assignment, you will receive full credit (100 points). **If you do not follow directions or if you submit an incomplete lecture assignment, you will lose 50 points.** Don't worry. You can try again! Lecture Assignments can be revised and resubmitted to potentially earn back the lost points. The final deadline for revising and resubmitting Lecture Assignments is Friday April 25 (the last day of classes) at 5 PM.

If you submit a lecture assignment late, you will lose 25 points. The final deadline for submitting late assignments is Friday April 25 (the last day of classes) at 5 PM.

Homework Assignments (Each homework assignment is worth 100 points)

The Homework Assignments will help you reflect on your co-curricular and life experiences. Reflective

writing is an important part of admission to health profession schools. Reflective writing is important for other career paths too. For example, many professionals submit a reflective statement as part of their annual evaluation. For those reasons, we have incorporated into this course lots of practice at reflective writing.

Some of the Homework Assignments will give you a chance to apply what you learned in that week's lecture videos. Other Homework Assignments will help you prepare for the next week's lecture videos. Thus, the course will work best if you first watch the videos while completing the Lecture Assignment, and then tackle the Homework Assignment. Most weeks, the Homework Assignment will be **due on Wednesday at 5 PM**.

If you follow directions and complete the entire Homework Assignment, you will receive full credit (100 points). **If you do not follow directions or if you submit an incomplete homework assignment, you will lose 50 points.** Homework Assignments can be revised and resubmitted to potentially earn back the lost points. The final deadline for revising and resubmitting Homework Assignments is Friday April 25 (the last day of classes) at 5 PM.

If you submit a homework assignment late, you will lose 25 points. The final deadline for submitting late assignments is Friday April 25 (the last day of classes) at 5 PM.

Final exam (100 points)

The final exam is simply another writing assignment which will be due during finals week. You do not need to study for it. **To pass the course, you must complete the final exam. The final exam is not optional.** [MSU Final Exam Policy](#)

Makeup assignments (Each makeup assignment is worth 25 points)

If you lost 25 points because you submitted a lecture assignment or a homework assignment late, you may submit a makeup assignment. A list of makeup assignments and the instructions will be posted on D2L. The deadline for submitting makeup assignments is Friday April 25 (the last day of classes) at 5 PM.

3. Grading Policy

3A. Grade Dissemination:

The grades for each assignment will be posted in the D2L Gradebook. Please check D2L for feedback comments, particularly if you need to resubmit an assignment. For assignments that are turned in on time, I typically grade them within 1 week. For assignments that are turned in late and for assignments that have been revised and resubmitted, I grade them as I have time.

3B. Graded Assignments and Course Grade:

This is a Pass / No Grade course. As such, each assignment will be graded in a similar way. For example, if your submission was satisfactory and submitted on time, you will receive 100 points. Unsatisfactory assignments can be revised and resubmitted. To pass the course, you must earn 2,400 points total.

Lecture Assignment and Homework Assignment grades and next steps

The table below describes the meaning of **Homework** and **Lecture Assignment** grades and what you need to do next.

Grade	Description	Action
100	Assignment was satisfactory. Submitted on time.	No further action is necessary.

75	Assignment was satisfactory. Submitted late.	No further action may be necessary. If you have multiple late assignments, you may need to submit make-up assignments to earn a passing grade in the course.
50	Assignment was unsatisfactory. Submitted on time.	Check the feedback, revise the assignment, and resubmit it by Friday April 25 . If your resubmission is satisfactory, I will change your grade to 100.
25	Assignment was unsatisfactory. Submitted late.	Check the feedback, revise the assignment, and resubmit it by Friday April 25 . If your resubmission is satisfactory, I will change your grade to 75. If you have multiple late assignments, you may need to submit make-up assignments to earn a passing grade in the course.
0	Assignment had not been submitted when I posted the grades.	Submit the assignment by Friday April 25 . If your submission is satisfactory, I will change your grade to 75.
--	I have not yet posted grades for the assignment.	Please be patient. I try to grade the assignments within 1 week of the due date. Sometimes I fall behind.

Makeup assignment grades and next steps

The table below describes the meaning of **Make-up Assignment** grades

Make-up Assignment Grade	Description	Action
25	Assignment was satisfactory.	No further action is necessary.
0	Assignment was unsatisfactory.	Check the feedback and resubmit the assignment by April 25 at 5 PM .
--	I have not yet posted grades for the assignment.	Please be patient. For make-up assignments that are submitted prior to the last week of classes, I will try to post the grades by April 25 at 5 PM .

Total possible points in the course

The table below describes the **total possible points** you can earn in this course.

Type of assignment	Maximum points per assignment	How many assignments?	Total possible points
Lecture	100	13	1300
Homework	100	13	1300
Final	100	1	100
Sum:			2700 total possible points for the course

Points needed to pass the course

The table below describes the points needed to earn a grade of P (pass) for the course.

Course grade	Points
P (pass)	2400 - 2700
N (no grade)	0 - 2399

Perfection is not necessary, but falling behind is dangerous

Your grade is in your hands. You can decide how to get to the 2400 points needed to pass the course. For example, perhaps you are having a very busy week. You can decide to free-up some time by submitting a PSL 101 assignment late. Sure, you will lose 25 points, but you can still pass the course. This flexibility can help you navigate the stressors of the semesters, but only up to a point. When students skip multiple weeks of assignments, it can be difficult to catch up. I encourage you to strike a balance. Give yourself permission occasionally to submit an assignment late, while also holding yourself accountable for staying on top of the weekly videos and assignments.

4. Course Schedule

The table below describes the weekly activities including week number, topic, lecture assignment, homework assignment, and due dates. **Yellow highlighting** indicates an unusual due date. All dates are tentative and subject to change at my discretion.

Week	Dates	Topic	Lecture assignment (Due Monday, 5 PM)	Homework assignment (Due Wednesday, 5 PM)
1	Jan 13–22	Course goals & Reflection rubric	#1 Rubric examples • Due Tues Jan 21	#1 Essay scoring • Due Jan 22
	Jan 20	MLK Day – MSU closed		
2	Jan 22-29	Reflective writing	#2 Dissecting the essay • Due Jan 27	#2 How do you study? • Due Jan 29
3	Jan 29 - Feb 5	Retrieval and other study skills	#3 Data on retrieval • Due Feb 3	#3 Do something new • Due Feb 5
4	Feb 5-12	Physiology careers and translational skills	#4 Inventory of skills • Due Feb 10	#4 O-Net • Due Feb 12
5	Feb 12-19	Resume writing	#5 Resume review • Due Feb 17	#5 Revised resume • Due Feb 19
6	Feb 19-26	Competencies for careers in health	#6 Self-assessment • Due Feb 24	#6 Three perspectives • Due Feb 26
	Mar 3-7		Spring Break	

7	Feb 26 – Mar 12	Problem solving, navigating conflicts, and stress management	#7 Values and hot buttons • Due Mar 10	#7 Stress management • Due Mar 12
8	Mar 12-19	Teamwork	#8 Teamwork • Due Mar 17	#8 Bias in health care • Due Mar 19
9	Mar 19-26	Cultural humility	# 9 Quality and culture • Due Mar 24	#9 Mistake essay • Due Mar 26
10	Mar 26 – Apr 2	Mistakes in medicine & Responsible conduct of research	# 10 Roles in RCR • Due Mar 31	#10 Communication fail • Due April 2
11	Apr 2-9	Research careers	#11 Research skills • Due Apr 7	#11 Phys-MAPS • Due Apr 9
12	Apr 9-16	Gap year opportunities	# 12 Things to consider • Due Apr 14	#12 SWOT and 4-year plan • Due Apr 16
13	Apr 16-23	Interviewing & Situational judgment tests	#13 Interview prep • Due Apr 21	#13 MMI prep • Due Apr 23
Friday April 25 at 5 PM is the final deadline for first submissions or revised submissions of all lecture assignments, homework assignments, and make-up assignments.				
Final	Apr 28 – May 2	The final exam will be posted to D2L by Monday April 28 and due Friday May 2 at 5 PM . If you do not submit the final assignment, you will receive an N (No grade) for the course.		

5. Course Materials and Technologies:

5A. Internet resources:

You do not need to purchase a textbook. All resources will be posted on D2L. Below are some of the websites you may be using in the course, and hopefully beyond the course.

- [AAMC core competencies for entering medical students](#)
- [AAMC postbaccalaureate premedical programs](#)
- [Aspiring Docs](#)
- [American Physiological Society](#)
- [Explore Health Careers](#)
- [iBioSeminars](#)
- [MSU Career Services Network](#)
- [MSU Center for Community and Engaged Learning \(Look in the “students” tab for hospital volunteering\)](#)
- [MSU Physiology research \(Click on a person’s name to find out about their research\)](#)
- [Pathways to Science \(A great place to find summer research programs\)](#)

5B. Required Technologies:

- The course requires access to high-speed internet, which would enable you to watch the lecture videos.
- I will post course materials to D2L, and you will submit your assignments to D2L as well. Please check to make sure you are using a D2L compatible browser here:

5C. Course platform:

This course will be delivered **online**. You will need your MSU NetID to login to the course from the **D2L homepage (<http://d2l.msu.edu>)**. In D2L, you will access lecture videos, lecture assignments, homework assignments, and links to other internet resources. You will submit all assignments via D2L.

5D. Technical Assistance:

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

- Visit the MSU Help site at <http://help.msu.edu>
- Visit the Desire2Learn Help Site at <http://help.d2l.msu.edu>
- Call the MSU IT Service Desk at (517)432-6200, (844)678-6200, or e-mail at ithelp@msu.edu

6. Course Policies

6A. Learning Continuity Statement:

If you become unable to participate in class for an extended time:

- You are expected to e-mail me as soon as you are able.
- In most cases, the regular course policies related to grading and make-up assignments will apply.
- In extraordinary cases, I will work with the student to devise a reasonable pathway for successfully completing the course.

6B. Course Continuity Statement:

If I become unable to run the course for an extended time:

- Students will receive an e-mail from me or Dr. Olson regarding any changes to the course.
- Typically, assignments that are submitted on-time will be graded within approximately 1 week. If I become unable to run the course, grading times might take longer.

6C. Intellectual property policy:

As members of a learning community, students are expected to respect the intellectual property of the instructor. All course materials presented to students are the copyrighted property of the course instructor and are subject to the following conditions of use:

- Students may not post the recordings or other course materials online or distribute them to anyone not enrolled in the class without the advance written permission of Dr. Seischab and, if applicable, any students whose voice or image is included in the recordings.
- Any student violating the conditions described above may face academic disciplinary sanctions.

6D. Course accommodations:

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 accommodations has been determined, you will be issued an Accommodation Letter. Please present this letter to me at the start of the term and/or two weeks prior to the accommodation date (test, project, etc). Requests received after this date will be honored whenever possible.

6E. Inclusion

“MSU welcomes a full spectrum of experiences, viewpoints, and intellectual approaches because they enrich the conversation, even as they challenge us to think differently and grow. However, we believe that expressions and

actions that demean individuals or groups compromise the environment for intellectual growth and undermine the social fabric on which the community is based.” -MSU Faculty Senate 2017.

During all course activities, let us all strive to **remain open**. Ask yourself, am I being judgmental? Have I stopped listening? Be mindful of **intent and impact**. Ask yourself, did they intend to hurt me? Was the impact of my words hurtful? All skills can be practiced, and with practice we improve. Let us dedicate this semester to intentionally practicing inclusion skills.

6F. Academic integrity & artificial intelligence

In this course you will be writing-to-learn. Specifically, you will be writing to learn about **yourself**, **your** goals, and **your** progress towards those goals. The use of artificial intelligence (ex. ChatGPT) is not appropriate in this course. All essays and assignments must be created by you, without the aid of artificial intelligence. The use of artificial intelligence will be subject to a penalty grade, which could include a course grade of N (No-pass).