

**PSL539 – Principles of Cell Biology and Pathophysiology**

Fall Semester 2 - 2019

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**Notice to Students:** Although course syllabi at MSUCOM have a consistent format, vitally important details differ by course. For this reason, you must read the syllabus thoroughly at the onset of each course to know what the course will provide and what is expected of you.

## Section 1 – Course Information

### Course Description

PSL539 is a 4-credit hour course.

Modern concepts of cell biology as a basis for understanding integration of structure (histology) and function (physiology) in health and disease (pathology). Introductions to adaptive growth response, cell injury, inflammation, hemodynamic disorders, and neoplasia.

### Course Goals

Each of the following Goals is described more fully in the "Overview of the Course", which is found at beginning of PSL 539 Course Pack.

- To help you learn the most medically relevant vocabulary and concepts in cell biology, physiology and pathology.
- To help you begin to grasp the profound implications of the fact that function is always linked to structure, in every organ system and at every level of organization, from molecules to the whole body.
- To help you learn to "see" microscopic structure.
- To help you apply the clinically important concepts of cell biology, physiology and pathology to solve problems and make logical predictions.
- To help train you in the disciplines of self-study and lifelong learning.
- To foster collaborative learning.
- To personify the approach and character of basic biomedical science.
- To prepare you for Socratic clinical instruction.
- To help you understand that cell biology, physiology and pathology is a tool for patient care.

### Learning Objectives

Specific Learning Objectives are provided in the Course Pack (Study Guide), at the beginning of the material for each lecture session and lab session.

### College Program Objectives

In addition to the course-specific goals and learning objectives, this preclerkship course also facilitates student progress in attaining the College Program Level Educational Objectives, which are published in the MSUCOM Student Handbook.

## Instructional Team

E-mail is the generally-preferred method of contact.

### Key to Campus sites:

- EL = East Lansing
- DMC = Detroit Medical Center
- MUC = Macomb University Center

### Course Coordinator

*(Note - Preferred method of contact is shown in italics)*

Name: Mei-Hui Tai, Ph.D.

Phone: 517-884-5126

Email: [taimeihu@msu.edu](mailto:taimeihu@msu.edu)

Address: 3186 Biomedical and Physical Sciences Building, EL

### Histology Laboratory Director

Name: Frances Kennedy, D.V.M., M.S.

Phone: 517-432-0467

Email: [kennedyf@msu.edu](mailto:kennedyf@msu.edu)

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### Histology Lab Leaders

Site	Name	Email	Phone
East Lansing	Frances Kennedy, D.V.M., M.S.	<a href="mailto:kennedyf@msu.edu">kennedyf@msu.edu</a> A514-C East Fee	517-432-0467
DMC	Janice Schwartz, Ph.D.	<a href="mailto:schwa317@msu.edu">schwa317@msu.edu</a> CG-71 Basic Sciences	313-578-9671
MUC	Carrie Nazaroff, Ph.D.	<a href="mailto:tatarcar@msu.edu">tatarcar@msu.edu</a> Room 1173 Building 4	582-263-6743

### Course Faculty

Name	Email	Phone	Site
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**\*\*Dr. Tai will be the contact faculty for Dr. Stephenson's and Dr. Spielman's lecture content. Please contact Dr. Tai for any inquiries and questions of Dr. Stephenson's and Dr. Spielman's lectures.**

### Curriculum Assistants

Site	Name	Email	Phone
East Lansing	Stephanie Goodrich	<a href="mailto:goodrics@msu.edu">goodrics@msu.edu</a>	517-432-5637
DMC	Alysia Gordon	<a href="mailto:john1329@msu.edu">john1329@msu.edu</a>	313-578-9629
MUC	Beata Rodriguez	<a href="mailto:rodri583@msu.edu">rodri583@msu.edu</a>	586-263-6799

Lab Attendants: Several second-year COM and CHM students assist in the histology laboratory.

### Lines of Communication

- For administrative aspects of the Course: contact the course coordinator Dr. Mei-Hui Tai ([taimeihu@msu.edu](mailto:taimeihu@msu.edu)).
- For content questions relating to a specific lecture or topic: contact the faculty presenter for that specific portion of the course or your SE MI on-site instructor.
  - At East Lansing – Dr. Mei-Hui Tai ([taimeihu@msu.edu](mailto:taimeihu@msu.edu))
  - At DMC -- Dr. Janice Schwartz ([schwa317@msu.edu](mailto:schwa317@msu.edu))
  - At MUC -- Dr. Carrie Nazaroff ([tatarcar@msu.edu](mailto:tatarcar@msu.edu))
- For absences/missed exams (see excused absence information below)
- Please set your notifications in D2L to immediate to receive posted News announcements. You may choose to receive notifications by email or SMS.

### Office Hours

Questions concerning may be discussed individually by making an appointment with the Course Coordinator, Dr. Mei-Hui Tai, 3186 Biomedical and Physical Sciences Building, EL, by phone at (517) 884-5126 or via e-mail: [taimeihu@msu.edu](mailto:taimeihu@msu.edu). The course coordinator is generally available on Thursday or Friday afternoons. DMC and MUC students can also arrange for a conference call or Zoom meeting on those times. Be sure to e-mail for an appointment.

### Course Web Site

The URL for the Course website is: <https://d2l.msu.edu>.

## LON-CAPA system – <https://loncapa.msu.edu>

LON-CAPA is the "Learning Online Network with Computer-Assisted Personalized Approach". In PSL 539, LON-CAPA will be used to administer:

- Basic Science Pretest -- This pretest is designed to familiarize you with the LON- CAPA interface and to stimulate your personal review of some basic concepts from chemistry, physics, math, and biology -- concepts that will be used but not taught in PSL 539 and your other Fall Semester courses. *Working through the Pretest is recommended, but not required. Your score on the Pretest does not contribute to your PSL 539 grades.*
- Pre-lab Problem Sets -- You are to complete a short, online problem set as part of your preparation for each of the 13 histology lab sessions in PSL 539. The first of these problem sets is for practice and will not contribute to your PSL 539 grade. The remaining 12 problem sets will be graded and will contribute to your Overall Course Score and grade in PSL 539 (see "Assessment" section of this Protocol). The Pre-lab Problem Set for each histology lab will become available at Noon on the Sunday preceding the lab, and will be due at Noon on Wednesday.
- Homework Problem Sets -- These online problem sets are designed to help you integrate concepts from lecture, lab, and self-study, and to challenge you to apply those concepts to solve problems that have direct clinical relevance. The first of these homework problem sets is for practice and will not contribute to your PSL 539 grades. The remaining 8 homework problem sets will contribute to your Overall Course Score and grade in PSL 539 (see "Assessment" section of this Protocol). The opening date and due date for each Homework Problem Set are in the list of Course Event Calendar and will be announced on the PSL 539 web site on D2L (in the weekly Announcements).
- Clinical Application Post-Session Problem Set -- This online LON-CAPA problem set is to test your understanding of the content which is discussed and covered in the Immuno-path Clinical Application session. The Clinical Application session is held on Oct. 25, 2019. The opening date and due date for this problem set will be announced on the PSL539 web site on D2L (in the weekly Announcement).

### Network access

To access the web-based D2L and LON-CAPA systems, you will need a reliable broadband internet connection and an up-to-date browser. Such access is readily available in the computer labs at your campus. Alternatively, you may use your own computer to access the internet via ports in study areas, dorm rooms, etc. Campus wireless may or may not be fast enough, depending on the circumstances. From off- campus locations, a cable modem, DSL connection, or equivalent will generally provide adequate speed and reliability. If you are having trouble using your own computer to access D2L or LON-CAPA, ask for help from the HIT-ET (Health Information Technology – Educational Technology) staff at your campus. Note, however, that arranging for timely, reliable access to D2L and LON-CAPA is ultimately your responsibility.

### Graded Problem Sets on LON-CAPA – Expected conduct

(<https://loncapa.msu.edu>)

The Pre-lab Problem Sets and the Homework Problem Sets on LON-CAPA are open- book exercises. Moreover, you are permitted to work collaboratively with your PSL 539 classmates in preparing answers to these problem sets. However, for each graded problem set, you are expected to log onto your account on the LON-CAPA system independently, and to enter your own answers for grading. Failure to enter your own answers, yourself, or entering another student's answers for him/her will be considered to be cheating, and a breach of professional behavior.

## Textbooks and Reference Materials

### Required

- PSL 539 Course Pack (Study Guide) for Fall Semester, 2019  
The Course Pack (which we will call the "Study Guide" will be produced and distributed in two parts. An electronic version of the Study Guide (in pdf format) is also available via a link on the PSL 539 D2L web site. The Study Guide is basically a workbook, developed by the course faculty to facilitate your achievement of the course objectives. Bring the relevant sections of the Study Guide to each lecture and lab session!
- Pawlina, Histology: A Text and Atlas, 8th ed., 2019. Lippincott, Williams & Wilkins [ISBN 978-1-4963-8342-6].  
*Note: It is essential that you have your own personal copy of this book! In particular, it is important that you bring your own copy to each histology lab session.*
- Rhodes & Bell, Medical Physiology: Principles of Clinical Medicine, 5th ed., 2017. Lippincott, Williams & Wilkins [ISBN: 978-1-4963-1046-0]
- Robbins & Cotran, Pathologic Basis of Disease, 9th ed., 2015. Elsevier Saunders [ISBN: 978-1-4557-2613-4]
- Ferrier, Lippincott's Illustrated Reviews: Biochemistry, 7th ed., 2017. Walters Kluwer/Lippincott, Williams & Wilkins [ISBN: 978-1-4963-4449-6]
- Sadler, Langman's Medical Embryology, 14th ed., 2019. Lippincott, Williams & Wilkins [ISBN: 978-1-4963-8390-7]

All of these textbooks will also be used in other courses in your curriculum, so you are advised to purchase and retain your own personal copies of these books.

### REEF Polling Use in Course

All students are required to purchase a subscription to REEF Polling, also known as iClicker Cloud. You are expected to bring the electronic device associated with that subscription to class. Learning events will proceed as planned, even if you have forgotten to bring your device.

In this course, REEF Polling input may be used in the following ways: to provide practice with concepts and principles, to stimulate discussion and/or to give mini-quizzes. Questions may be posed at any time during the class hour. No make-up experiences will be provided should you forget your REEF polling device. REEF polling will be the only mechanism to record attendance during large group lectures.

- If the REEF polling is used to take attendance, you will be expected to arrive in class on time and to stay for the duration of the assigned activity.
- If you bring your REEF polling device and it fails during the lecture, please see the course representative immediately after the lecture to inform us of the problem. NO points for attendance will be given unless you notify us at the time of the lecture.

Please refer to additional REEF polling policy information provided in Section 2 of this syllabus.

## **Specific Procedures for the PSL 539 Histology Laboratory**

**Access** - Locations of histology teaching labs:

- EL – Room E200 Fee Hall (across the hall from the Gross Anatomy Lab).
- DMC – Room G031.
- MUC – Room 211 of the UC-4 Building.

At all sites, the lab is computer-based; it uses virtual slides static images (digitized microscope slides) as well as images from other designated web sites. Students will team up (in groups of 2-3) to share the laboratory workstations. At each lab session, you will need your lab manual (contained within the course Study Guide), your required histology text (Pawlina), and your Reef polling device.

Scheduled Labs: Your College will assign you to a specific 2-hour block for histology labs. This lab section assignment will also be posted on the PSL 539 D2L web site. Space and instructional support are limited in the histology lab, so it is essential that you attend only the 2-hour section to which you have been assigned. Also, answers that you submit during lab quizzes will earn course credit only if you are attending the lab session to which you were assigned.

Please consult the University and College Policies section of this Syllabus for information regarding lab sessions that you miss due to illnesses or emergencies. The process for seeking a permanent change in your lab session assignment is also explained there.

After Hours Study: For security reasons, access to the computers in the histology labs may be limited except during scheduled lab sessions. Remember, however, that all laboratory materials, including the virtual microscope static images, are always available on the web via any computer that has broadband internet access. The web addresses for accessing histology lab material are posted on the PSL 539 D2L site.

### **Individual Readiness Quizzes (IRQ's) in Histology Lab – Expected conduct**

IRQ's will be administered via the REEF polling system, in accordance with the REEF polling policy statement (see above).

An IRQ will be administered at the beginning of each lab session. It is your responsibility to be on time. You may be assigned to a specific seat for an IRQ, and you may be asked to change seats during an IRQ. All IRQ's are "closed book". You must not consult notes, books, electronic devices, or other reference material during an IRQ, except as specifically directed by the Lab Instructor. During an IRQ, you must not communicate answers to IRQ questions to another student or attempt to copy answers from another student. Moreover, you are not to reveal the content of an IRQ to a student who is assigned to a subsequent lab section and therefore has not yet taken the IRQ. The

expectations regarding professional behavior and academic honesty that apply to examinations are to be applied during IRQ's as well.

## **Preparation for each laboratory session -- Pre-lab problem sets and Individual Readiness Quizzes**

To make your time in histology lab productive, it is essential that you prepare beforehand. The PSL 539 Study Guide includes an Introduction to each lab session and a specific assignment for you to work through before coming to lab ("Preparation for Lab"). You should also skim through the detailed directions for the lab session in order to get an idea of what you will be expected to accomplish during the lab session.

To reinforce the importance of preparing for lab, and to allow you to verify your readiness for lab, we will post a Pre-lab Problem Set online prior to each lab session. You will access the Pre-lab Problem Sets via the LON-CAPA system (<http://loncapa.msu.edu>). The problem sets will be available beginning Sunday at Noon and will be "due" at Noon on Wednesday. Successful completion of the pre-lab problem sets on LON-CAPA will contribute to your Overall Course Score and Course Grade (see "Assessment" section of this Syllabus).

As further reinforcement for advance lab preparation, we will begin each histology lab session with a brief Individual Readiness Quiz (IRQ), to be administered via the Reef polling system. Course credit will be awarded for answering IRQ questions correctly (see "Assessment" section of this Protocol). The IRQ questions should not be difficult for students who have conscientiously completed both the "Preparation before lab" (as specified in the Study Guide) and the Pre-lab Problem Set (on LON-CAPA).

## **Resources to bring to each laboratory session**

- REEF polling device – In order to receive Individual Readiness Quiz (IRQ) credit, you must personally attend the lab session to which you are assigned, and you must submit answers using your personal REEF polling device, which you have obtained and web-registered in accordance with directions provided by the College. IRQ answers submitted in another way (e.g. written on paper or submitted using another student's REEF polling device) will not be accepted.
- Study guide – Your Study Guide provides an essential guide to the structural features you are looking for during lab and to their significance.
- Histology textbook – Both the Study Guide and online lab material will frequently refer to pertinent figures in the required histology textbook (Pawlina), so bring your histology textbook with you to lab!

## **Making the most of your time in histology lab**

Being well prepared for each histology lab session (as directed above) and staying for the full lab time will allow you to take full advantage of the opportunity that each lab provides to work collaboratively with your classmates. The lab sessions also provide excellent opportunities for face-to-face interactions with faculty about lab material, other course content, or ancillary matters of interest. Furthermore, participating in the interactive review of questions (carried out in the last half hour of each lab session) will provide valuable preparation for the integrative questions on



course exams.

### **Protecting the laboratory work stations**

- Do not consume food or drink while seated at a computer station.
- Do not touch the computer monitor screens with anything other than the pointers that are supplied. No finger prints! No pens or pencils!
- During histology lab sessions, do not use the lab computers for activities unrelated to lab work (i.e., no personal e-mail, downloads, or web surfing).

### **Course-based Academic Support**

The course faculty are here to facilitate your learning. Please feel free to contact the Course Coordinator with any personal issues you may have involving this course. Additional academic support resources can be accessed through MSUCOM Academic and Career Guidance and MSUCOM Personal Counseling.

**Course Topics**

**Overview:**

<b><u>Topic</u></b>	<b><u>Lecture Sessions</u></b>	<b><u>Lab Session</u></b>
<b>Fundamentals:</b>		
<b>Introducing ten major themes</b>	<b>1-4</b>	<b>1</b>
<b>Basic cytology</b>	<b>5</b>	<b>2</b>
<b>Elaboration on Signaling</b>	<b>6-8</b>	
<b>Early embryology</b>	<b>9</b>	
<b>Developmental mechanisms</b>	<b>10</b>	
<b>Connective tissue: Connective tissue proper</b>	<b>11-12</b>	<b>3</b>
<b>More connective tissue: Cartilage and bone</b>	<b>13-14</b>	<b>4</b>
<b>Elaboration on major theme: Transmembrane transport</b>	<b>15-17</b>	
<b>Epithelium</b>	<b>18-19</b>	<b>5</b>
<b>More connective tissue: Blood</b>	<b>20-24</b>	<b>6</b>
<b>Eicosanoids and quick review of signaling</b>	<b>25</b>	
<b>Lymphatic System</b>	<b>26-27</b>	<b>7</b>
<b>Cardiovascular overview</b>	<b>28-29</b>	
<b>Cell Injury and cellular accumulations</b>	<b>30-32</b>	<b>8</b>
<b>Inflammation and Tissue renewal</b>	<b>33-35</b>	<b>9</b>
<b>Nervous tissue</b>	<b>36-38</b>	<b>10</b>
<b>Skeletal muscle</b>	<b>39-42</b>	
<b>Cardiac and smooth muscle</b>	<b>43-44</b>	<b>11</b>
<b>Autonomic nervous system</b>	<b>45-46</b>	
<b>Hemodynamic disorders</b>	<b>47-48</b>	<b>12</b>
<b>Neoplasia</b>	<b>49-53</b>	<b>13</b>

**Specific Course Schedule:** A listing of Course Activities is posted on the PSL 539 D2L site. *However, the official Course Calendar is the Google Calendar for COM Class of 2023 (googleapps.msu.edu).*

## Courses begin and end dates

PSL539 begins on August 26, 2019 and ends on December 10, 2019. See addendum for detailed daily course schedule.

## Exams/Assessments

The successful achievement of learning objectives will require knowledge and skills acquired in other portions of the overall MSUCOM educational program. Students will be expected to apply concepts and vocabulary learned in other courses to problem-solving for exams/assessments in this course.

To maintain security of assessments, you may NOT post questions on the discussion board regarding exam questions or quiz questions. Kindly email your questions to the course coordinator.

There will be a total of seven exams given in PSL539. Your score on the final exam and your scores on the case study sessions will determine your grade in the course. The assessment schedule is as follows:

<b>Assessments</b>	<b>Projected Points</b>	<b>Material to be Covered</b>	<b>Relevant lecture sessions</b>	<b>Relevant lab sessions</b>
<b>Unit Exam #1</b> Monday, 9/9/19	<b>36</b>	Major Themes, Cytology, Signaling, Early Embryology, Developmental Dynamics	1-10	1-2
<b>Unit Exam #2</b> Monday, 9/23/19	<b>27</b>	Connective Tissue Proper, Cartilage & Bone and Transport	11-17	3-4
<b>Unit Exam #3</b> Monday, 10/7/19	<b>30</b>	Epithelium and Blood, Eicosanoids signaling	18-25	5-6
<b>Unit Exam #4</b> Monday, 10/21/19	<b>27</b>	Lymphatic System, Cardiovascular Overview and Cell Injury	26-32	7-8
<b>Unit Exam #5</b> Monday, 11/4/19	<b>24</b>	Inflammation, Tissue Repair and Nerve	33-38	9-10
<b>Unit Exam #6</b> Monday, 11/18/19	<b>27</b>	Muscle and Autonomic nervous system	39-46	11
<b>Unit Exam #7</b> Tuesday, 12/10/19	<b>27</b>	Hemodynamic disorders, and Neoplasia	47-53	12-13
<b>TOTAL</b>	<b>198</b>			

### Summary: Components of your Overall Course Score

Component	Description	Maximum Points
Labs (best ten):	20 Lab Points maximum	20 points maximum
Homework problem sets:	12 Homework Points maximum	12 points maximum
Clinical Application post-session problem set	2 points maximum	2 points maximum
Exam questions:	198 questions @ 1 point each	198 points maximum
Total = Overall Course Score		232 points maximum

### Missed PSL 539 lab quizzes

- If illness, emergency, or other compelling circumstance makes it impossible for you to attend two or more of your assigned lab sessions, you may request an excused absence from your Associate Dean, as directed, above. If an excused absence is granted for two or more lab sessions, your next step is to contact Course Coordinator: Dr. Tai ([tameihu@msu.edu](mailto:tameihu@msu.edu)).
- NOTE: In no case will an excused absence be granted for a single, isolated absence from a lab. Such an excuse is unnecessary, since a student can miss one lab quiz without losing any course points.
- No make-ups are offered for lab quizzes (IRQ's). Allowing for illness or emergency is why only ten of your twelve graded Pre-lab scores count toward your Overall Course Score. Appeals for additional consideration for multiple missed quizzes must be accompanied by an excused absence from your Student Affairs Office (as explained above), which is presented to the Course Coordinator -- Dr. Tai ([tameihu@msu.edu](mailto:tameihu@msu.edu)).

*Permanent changes in PSL 539 lab assignment: The College assigns you to a 2-hour time block for your PSL 539 histology lab time. This lab assignment will also be posted on the PSL 539 D2L website. Space and instructional support is limited in the lab, so it is essential that you attend only the 2 hour block to which you have been assigned by the College. Also, answers that you submit during lab quizzes will earn course credit only if you are attending the lab session to which you are assigned. Any permanent change in your lab time assignment must be based on compelling need and negotiated in advance with the College. If you must seek such a permanent lab reassignment, contact the Course Assistant for your campus (as listed on page 3 of this Syllabus).*

### Assessment

#### Your Overall Course Score in PSL 539 will be based on four components:

- Pre-lab Preparation— To reinforce the importance of preparing for lab, and to allow you to verify your readiness for lab, we will post a Pre-lab Problem Set online (using the LON-CAPA system) prior to each lab session. In general, the problem sets will be available beginning Sunday at Noon and will be "due" at Noon on Wednesday. The problem set for Lab #1 is for practice and will not contribute to your Overall Course Score. The problem sets for Labs #2 - #13 will be graded and will contribute to your Overall Course Score.

As further reinforcement for lab preparation, we will begin each of the histology lab sessions

with a brief Individual Readiness Quiz (IRQ), which will be administered via REEF polling system. The IRQ for Lab #1 is for practice and will not contribute to your Overall Course Score. The IRQ's for Labs #2 - #13 will be graded and will contribute to your Overall Course Score.

A total of 2 Lab Points will be assigned to each of the twelve graded labs (Labs #2-#13). Specifically, each Pre-lab Problem Set on LON-CAPA is worth 1 point, and each IRQ is worth 1 point. Your best ten Pre-lab LON-CAPA and best ten Lab IRQs (out of the twelve graded labs) will count toward your Overall Course Score. Achieving the maximum score of 2 on at least ten of the twelve graded labs (Labs #2-#13) would yield 20 Lab Points, which would contribute 20 points toward your Overall Course Score.

- Homework Problem Sets -- These online problem sets are designed to help you integrate concepts from lecture, lab and self-study, and to challenge you to apply those concepts to solve problems that have direct clinical relevance. Additional information about each problem set (including opening and closing dates for each problem set) will be announced on the course D2L web site. The first Homework Problem Set is for practice and will not contribute to your Overall Course Score. The remaining eight Homework Problem Sets will be graded and will contribute to your Overall Course Score. A total of 1.5 Homework Points will be assigned to each of the eight graded problem sets. Achieving the maximum of 1.5 Homework Points on each of the eight graded problem sets would yield a total of 12 Homework Points, which would contribute 12 points toward your Overall Course Score.
- Clinical Application Post Session Problem Set -- This online LON-CAPA problem set tests your understanding of the content that is covered in the Immuno-path Clinical Application Session, Which is held on October 25, 2019. A total of 2.0 points will be assigned to this problem set. Achieving the maximum of 2.0 points on this problem set would contribute 2.0 points toward your Overall Course Score.
- Exams -- There will be seven Unit Exams given during Semester 2. PSL 539 course material appears on all of those exams. Specific questions in Unit Exams #1-7 will be assigned course credit in PSL 539, as indicated in the chart below. Altogether, 198 exam questions will count toward your Overall Course Score in PSL 539. These exam questions will be based on Learning Objectives (listed at the beginning of each lecture and lab session in the Course Pack). Many of the questions will integrate material from lectures, labs, and the assigned self-study activities. Each of the 198 exam questions that count toward your Overall Course Score in PSL 539 will have the same weight. Each of these questions that you answer correctly will contribute 1 point toward your Overall Course Score (making a maximum of 198 points that can be earned on exam questions in PSL 539).

## Course Grades

A student's course grade is determined by the following formula:

$$\frac{(\text{exam 1} + \text{exam 2} + \text{exam 3} + \text{exam 4} + \text{exam 5} + \text{exam 6} + \text{exam 7} + \text{Labs} + \text{Homework problem sets} + \text{Clinical application post session problems})}{(\text{total points possible})} \times 100\% \\ = \text{Final Percent Score}$$

- **P-Pass**—means that you have achieved a satisfactory level of performance and will receive credit for this course. To obtain a “P” grade for this course, you must earn a final percent score of 70%.
- **N-No Grade**—means that you have not achieved a satisfactory level of performance and no credit will be granted for this course. If you earn a final percent score below 70%, you will receive an “N” grade.
- **Remediation** – If you receive an “N” grade and meet the criteria below, you will be eligible to attempt remediation:
  - Earn a final percent score in the course of 60 % or greater

The remediation opportunity for this course will be by examination. Passing is 70%.

All remediation exams for semester 2 are scheduled for Thursday, January 2, 2020 or Friday, January 3, 2020. Refer to the remediation policy information provided in Section 2 of this syllabus for more information.

\* Notes:

- No "rounding up" will be done in calculating your Overall Course Score.
- Your Course Grade depends on the percentage of the maximum score that you earned.

### **The bottom line on professional behavior**

Based on many years' experience, we expect that almost all students, through their own, honest efforts, will earn passing grades in PSL 539. However, failing PSL 539 (and then having to remediate) is not the worst thing that could happen to you in this course.

The worst thing would be to attempt to raise your own course score, or a classmate's score, by engaging in some form of cheating. Engaging in dishonest behavior erodes your self-respect, tarnishes the image of your class and your college, jeopardizes your medical career, and demeans the medical profession. Just don't do it!

If you have any questions or concerns about appropriate/inappropriate behavior in this course, please contact either of the Course Coordinator and/or your college's academic or student affairs administrators. Your communication may be anonymous, if you wish.

### **Achievement, not competition**

The sole goal of the faculty is to facilitate your learning of cell biology and physiology. In all respects, the evaluation scheme for the course is set up to recognize and reward your best, honest efforts to achieve the learning objectives. No "curves" are used in grading, so there is no limit to the number of students who can earn high scores. As a result, a poor performance by another student will not benefit you in any way, whatsoever. Therefore, we expect you to cooperate with and encourage your classmates to the greatest extent possible (within the boundaries of professional integrity, of course).

We will be delighted if everyone does well in the course. However, we will not lower standards in order to "inflate" student performance. Easing standards is unfair to all concerned. It would give a false sense of accomplishment to marginal students, who would then be likely to have trouble in future courses and on Board exams. It would diminish the academic reputation of this medical school and erode the standards of the profession. It would also be an abrogation of our responsibility to the public at large, which expects expert medical care from thoroughly competent physicians. Although we will not lower standards to make things "easier", we will work with you in every other way possible to help you achieve success. Just tell us what you need.

## **Student Evaluation of the Course**

We want your feedback on how to improve this course.

- Informal Feedback: Feel free to approach the Course Coordinator, Dr. Mei-Hui Tai ([taimeihu@msu.edu](mailto:taimeihu@msu.edu)), or any of the other course faculty with your reactions and suggestions. Or write out your comments and email them to the Course Coordinator or Faculty. From time to time, we may also convene focus groups of students, as an additional way to elicit your opinions and suggestions.
- Formal Evaluation: In addition to the above, we ask every student in the class to complete formal on-line course evaluation upon conclusion of the course. Student feedback provides Course Coordinators with valuable information regarding their performance, the performance of their colleagues, and the quality of the course. The information gained from these evaluations is used to continuously improve future offerings of this course. Students can access the evaluation system at: [MSUCOM Pre-clerkship Evaluation System](#).

## **Section 2 – Policies**

### **Academic Honesty and Professionalism**

Every student is responsible for their behavior and is expected to adhere to all MSU and MSUCOM policies of academic honesty and professionalism, as outlined in the MSUCOM Student Handbook and the MSU Medical Student Rights and Responsibilities. These documents may be found on the MSUCOM website.

Incidents of academic dishonesty or professional misconduct will be addressed by the faculty, administration or staff; such action may include, but is not limited to: giving a failing grade, referring a student for judicial review, directing the student to the Associate Dean of Medical Education, evaluation by the Committee on Student Evaluation, and other actions outlined in the Medical Student Rights and Responsibilities document.

### **Absences from Mandatory Class Sessions and Examinations/Assessments**

It is the responsibility of each student to know and comply with the MSUCOM policy regarding absences from mandatory sessions and examinations. This policy may be found in the MSUCOM Student Handbook on the MSUCOM website. Requests for an excused absence must be submitted via the [student portal](#).

### **Computer-Based Testing**

It is the responsibility of each student to know and comply with the MSUCOM policy on computer-based testing. This policy may be found in the MSUCOM Student Handbook on the MSUCOM website.

### **Medical Student Rights and Responsibilities**

If problems arise between instructor and student, both should attempt to resolve them by informal, direct discussions. If the problems remain unsolved, the Associate Dean for Medical Education and/or the MSU Ombudsperson may be consulted. The MSU Medical Student Rights and Responsibilities (MSRR) document defines processes for additional steps, including submission of a formal grievance. The MSSR may be found in the MSUCOM Student Handbook and online at [splife.studentlife.msu.edu](http://splife.studentlife.msu.edu).

### **REEF Polling (iClicker Cloud) Policy**

It is the responsibility of each student to know and comply with the Reef Polling (iClicker Cloud) Policy. This policy may be found in the MSUCOM Student Handbook. If you forget your device or if it does not work, for whatever reason, no make-up experiences will be provided, and no points will be given. If attendance is taken, you will be expected to arrive in class on time and to stay for the duration of the assigned activity.

### **Remediation Policy**

The MSUCOM Policy for Retention, Promotion and Graduation states that a student must complete each required course to progress in the curriculum. A student who completes a course and receives an “N” grade will have that grade recorded on their official transcript and must meet the course requirement by successfully remediating or repeating the course.



A student will be eligible to attempt remediation of the course if they meet the criteria described in the “Course Grades” section of this syllabus. A student who is not eligible to attempt remediation or fails the remediation must retake the course. This policy and the process by which an eligible student may remediate a course may be found in the MSUCOM Student Handbook on the MSUCOM website.

## **Requests for Special 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 <https://rcpd.msu.edu>. Once eligibility for an accommodation has been determined, you may be issued a Verified Individualized Services and Accommodation (VISA) form. Please present the VISA to Nancy Thoma, [thoman@msu.edu](mailto:thoman@msu.edu), A333 East Fee Hall at the start of the term and/or two weeks prior to the assessment event (test, project, labs, etc.). Requests received after this date will be honored whenever possible.

## **Title IX Notifications**

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 [titleix.msu.edu](http://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 to protect the health and safety of MSU community members and others. Instructors must report the following information to other University offices (including the Department of Police and Public Safety):

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child;
- Allegations of sexual assault, relationship violence, stalking, or sexual harassment; 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 and Psychiatric Services.

## **Addendum: Course Schedule**

Course schedule will be posted as a separate document on the same web page as this syllabus.