

IB 427 - INSECT PHYSIOLOGY

Teaching Team

Instructor

Marianne Alleyne
 Department of Entomology
vanlaarh@illinois.edu
 xyz Morrill Hall
 217-333-wxyz (office)
 Twitter: @Cotesia1

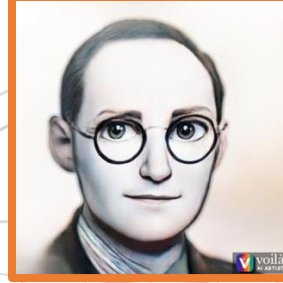
Office Hours MWF – after class



Teaching Assistant

Vinny Wigglesworth
 Department of Entomology
quickprof1@illinois.edu
 007 Berta Scharrer Hall (Office)
 Phone: 217-555-1234
 Twitter: @vinnywiggle

Office Hours F 12-2PM



Course Description

This course is an in-depth examination of the principal physiological and biochemical functions of insects. The course covers the history of the field of insect physiology, as well as the current status, and future directions. Connections will be made between insect physiology ("how insects work") and insect genomics, insect ecology, integrated pest management, etc. The course includes an inquiry-driven laboratory portion. Students work in groups to generate hypotheses, design experiments, collect and analyze data, and write up their results. Offered in alternate years.

The lectures will be in-person OR (a)synchronously online (see lecture schedule). The laboratory meetings will be in-person (unless COVID19 restrictions force us to draw up alternate plans. All assignments will be posted and submitted on the course website (learn.illinois.edu).

Special note for undergraduate students. The prerequisites for this course are IB 202 and IB 401; undergraduates will need consent of instructor to enroll. Please be aware that this course was designed for graduate students who are getting their graduate (professional) degree in entomology. The focus will be on relatively few model insect systems and the course will have a lot of biochemistry content.

Class Meeting Times and Location

Lecture	IB 427 AL1	MWF – 1 hour*	2083 Natural History Building or via Zoom
Laboratory	IB 427 AB1	T – 3 hours	4074 Natural History Building or Beckman Institute

*At the start of a new topic the lecture will be done virtually, mostly asynchronously. On those days students will not need to come to class.

Course Learning Goals

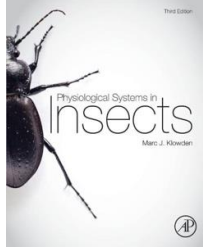
- Master an understanding of how insects function.
- Become familiar with the past, present, and future of insect physiological research.
- Synthesize information from model systems and apply what you know to diverse insect systems.
- Understand how insect physiology relates to other fields of entomology, as well as to human society.

Student Learning Objectives

- Discuss the relationship between biochemical processes and anatomical structures involved in allowing insects to complete various physiological processes.
- Illustrate how various biochemical, molecular and physiological systems are interdependent.
- Evaluate seminal experiments conducted by the major players in the field of insect physiology and how their work contributed to our current understanding of insect function, while also gaining an appreciation for how a lack of diversity and inclusivity might have hampered the field.
- Analyze, interpret, critique, and synthesize classical and recent primary literature on insect physiology.
- Compare and contrast the physiological systems among insects with diverse life histories.
- Develop conclusions on to what extent insects are good model systems for studying broader biological fields and why.
- Analyze the interchange between insect species' physiology and its evolution, ecology, and behavior.
- Predict which aspects of insect physiology can be used for insect control purposes.
- Be inspired by insect physiological systems to design new technologies, materials, and structures. (Bioinspired Design)

Required Textbook

- *Physiological Systems in Insects*, 3rd Edition. 2013. Marc Klowden



- Journal articles, videos and other materials will be posted to the course website and/or provided in class

The book is available through the UIUC library electronic textbook access.

1. Go to library.illinois.edu
2. Log-in using your UIUC ID
3. Search for [Physiological Systems of Insects] and click on the Third Edition (With half a beetle on the cover)
4. Click on the ScienceDirect E-books link
5. Download the pdf of the desired chapters

The background of this section features a faint anatomical diagram of an insect with labels: 'a. head', 'b. thorax', 'c. abdomen', 'exoskeleton', and '5. compound eyes'.

Course Organization

The topic of this course is “how insects work.” The great insect physiologist Sir Vincent B. Wigglesworth opened his 1934 monograph on insect physiology by stating that his goal was to describe the “fundamental processes of vital activity,” but then went on to make it clear that he would begin by dealing with “physiology on the humbler plane: with the grosser functions of the organs and tissues, and with the mechanisms by which these functions are coordinated to serve the purpose of the insect as a whole.” And so will it be with IB 427.

3 This course consists of lectures, online content, required readings, content on important classic experiments and the “famous” insect physiologists who performed them, laboratory exercises, student-created content about physiologists currently active, and laboratory reports. Three themes will permeate all topics. The first is what one normally thinks of as course content – the answers to the question of how insects work. The second is the historical context of the content (How did we get to this point?). The third is the development of all members of the class as researchers and scientific writers and as scientists learning, working and teaching online to a broader audience (broader than just the instructor and course-mates).

Content is provided by the lectures, textbook, online lessons, as well as through recently published research and review articles. Historical context is provided by the lectures, the textbook, and biographies and classic articles of insect physiologists. The laboratory exercises will be developed and performed by the students themselves working in pairs (with support of the TA and the instructor). Practice in scientific writing is obtained by the laboratory write-up, blog articles, and by writing exam questions.

It is assumed that the students know the basics of vertebrate physiology, so review will be limited. The following biases of the instructor will be evident. First, the emphasis will be on general solutions to physiological problems rather than on specialists (however, I will try to cover interesting observations on insects that the students are working on for their own research). Second, even though the solutions reflect phylogeny, this aspect of the subject will not be emphasized. Third, physiological adaptations also reflect ecology, but this will not be emphasized. Fourth, understanding the basics of molecular biology is required, but is not the whole story, the same goes for biochemistry. Fifth, the emphasis will be on a fairly narrow range of “model” insects useful for physiological studies rather than on diversity or on specific beneficials and pests (but again, I will try to also mention some of the insects studied by the student, and welcome any input). Sixth, bioinspired design is my research area and it will be heavily featured during the lectures.

Lecture Schedule

It is the instructor’s goal to provide an interactive learning classroom. During every in-person class meeting students will be involved in active learning projects in the class. Other times the instructor will use the whiteboard to cover a topic. Occasionally Powerpoint presentations will be used. Lecture content will be posted on the course website shortly before class, but in abbreviated form. To complete the content the students should enter information they deem important on those electronic notes provided.

The introductory content related to the main topics will be delivered asynchronously online in the form of an asynchronous online lesson. Before Spring Break these online lessons fall on Fridays (but not every Friday), after Spring Break these online lessons fall on Mondays (but not every Monday). Most of this content will be an introduction to the next topic to be discussed in class, and knowledge about the content will be assessed through a pre-quiz due on Friday/Monday evening.

Lectures will closely follow the topics in the Klowden textbook. I encourage discussion and questions during class. Please feel free to make suggestions on how lectures may be improved. I especially welcome content in different modalities that could be shared with the rest of the class.

Lecture Modality Legend

Live online lecture through Zoom (Synchronous) (Zoom link, meeting ID, Passcode) In case of necessary travel by Marianne Alleyne
Live face-to-face lecture in 2083 NHB
Asynchronous, pre-recorded lecture available on course website
Complete before the lecture

Week 1 – January 18-21

L1-Wednesday	<ul style="list-style-type: none"> • Course Syllabus • Introduction to Insect Physiology 	
L2-Friday	<ul style="list-style-type: none"> • Homeostasis • Insect Integument 	<ul style="list-style-type: none"> • Reading: It's not a Bug, It's a Feature: Functional Materials in Insects. Schroeder et al. Adv. Mat. V 30, 2018 (PDF link)

Week 2 – January 24-28

L3-Monday	<ul style="list-style-type: none"> • Cuticle chemistry 	<ul style="list-style-type: none"> • Pre-quiz #1 via LMS, complete before noon.
L4-Wednesday	<ul style="list-style-type: none"> • Molting 	
L5-Friday	<ul style="list-style-type: none"> • Endocrine system - introduction 	<ul style="list-style-type: none"> • Reading: A Life's Journey Through Insect Metamorphosis. Riddiford. Ann. Rev. Entomology. V 65, 2020 (PDF link)

Week 3 - January 31-February 4

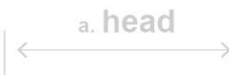
L6-Monday	<ul style="list-style-type: none"> • Endocrine system – history 	<ul style="list-style-type: none"> • Pre-quiz #2 via LMS, complete before midnight
L7-Wednesday	<ul style="list-style-type: none"> • Endocrine system – history (con't) 	
L8-Friday	<ul style="list-style-type: none"> • Endocrine system – PTTH 	<ul style="list-style-type: none"> • Submit Exam Question on Assigned Topic (A), complete before midnight • Reading: Developmental Mechanisms of Body Size and Wing-Body Scaling in Insects. Nijhout & Callier. Ann. Rev. Entomology. V 60, 2015 (PDF link)

Week 4 – February 7-11




L9-Monday	<ul style="list-style-type: none"> • Endocrine system – JH 	
L10-Wednesday	<ul style="list-style-type: none"> • Endocrine system – Ecdysteroids 	
L11-Friday	<ul style="list-style-type: none"> • Reproductive system - introduction 	<ul style="list-style-type: none"> • Peer-review Exam Question on Assigned Topic (A), complete before midnight

		<ul style="list-style-type: none"> • Reading: TBD but will cover mosquito egg production
--	--	---

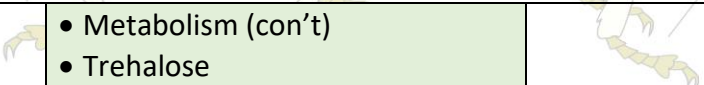
Week 5 – February 14-18

L12-Monday	<ul style="list-style-type: none"> • Reproductive system – egg production 	<ul style="list-style-type: none"> • Pre-quiz #3 via LMS, complete before midnight
L13-Wednesday	<ul style="list-style-type: none"> • Reproductive system – male 	
L14-Friday	<ul style="list-style-type: none"> • Digestive system - introduction 	<ul style="list-style-type: none"> • Reading: Extracellular Nutrient Digestion and Absorption in the Insect Gut. Holtof et al. Cell and Tissue Research. V 377, 2019 (PDF link)

Week 6 – February 21-25

L15-Monday	<ul style="list-style-type: none"> • Digestive system (con't) 	<ul style="list-style-type: none"> • Pre-quiz #4 via LMS, complete before midnight
L16-Wednesday	<ul style="list-style-type: none"> • Digestive system (con't) 	
L17-Friday	<ul style="list-style-type: none"> • Nutrition • Metabolism 	<ul style="list-style-type: none"> • Submit Exam Question on Assigned Topic via LMS (B), complete before midnight • Reading: Lipid metabolism in Insect Disease Vectors. Gondim et al. Insect Biochem and Mol Biol. V 101, 2018 (PDF link)

Week 7 – February 28-March 4

L18-Monday	<ul style="list-style-type: none"> • Metabolism (con't) • Trehalose 	
L19-Wednesday	<ul style="list-style-type: none"> • Intermediary metabolism 	
L20-Friday	<ul style="list-style-type: none"> • Circulatory System 	<ul style="list-style-type: none"> • Peer-review Exam Question on Assigned Topic (B), complete before midnight • Reading: The Insect Circulatory System; Structure, Function, and Evolution. Hillyer & Pass. Ann. Rev. Entomology V 65, 2020 (PDF link)

Week 8 – March 7-11

L21-Monday	<ul style="list-style-type: none"> Cellular Immune System 	<ul style="list-style-type: none"> Pre-quiz #5 via LMS, complete before midnight
L22-Wednesday	<ul style="list-style-type: none"> Humoral Immune System 	
FT-Friday	<ul style="list-style-type: none"> Class “Field Trip” to the Rare Book and Manuscript Library 	<ul style="list-style-type: none"> Social Media posts about insects, insect physiology, and the rare books about insects, complete before midnight

Spring Break – March 14-18

Week 9 – March 21-25

L23-Monday	<ul style="list-style-type: none"> Respiratory System 	<ul style="list-style-type: none"> Reading: Functional Hypoxia in Insects: Definition, Assessment, and Consequences for Physiology, Ecology, and Evolution. Harrison et al. <i>Ann. Rev. Entomology</i> V 63, 2018 (PDF link)
L24-Wednesday	<ul style="list-style-type: none"> Respiratory System - adaptations 	<ul style="list-style-type: none"> Pre-quiz #6 via LMS, complete before midnight
L25-Friday	<ul style="list-style-type: none"> Respiratory System – adaptations (con’t) 	<ul style="list-style-type: none"> Submit Exam Question on Assigned Topic via LMS (C), complete before midnight


Week 10 – March 28-April 1

L26-Monday	<ul style="list-style-type: none"> Excretory System 	<ul style="list-style-type: none"> Reading: Physiology, Development, and Disease Modeling in the <i>Drosophila</i> Excretory System. Cohen et al. <i>Genetics</i>, V 214, 2020 (PDF link)
L27-Wednesday	<ul style="list-style-type: none"> Nitrogen metabolism 	<ul style="list-style-type: none"> Pre-quiz #7 via LMS, complete before midnight
L28-Friday	<ul style="list-style-type: none"> Excretory System – adaptations 	<ul style="list-style-type: none"> Peer-review Exam Question on Assigned Topic (C), complete before midnight

Week 11 – April 4-8

L29-Monday	<ul style="list-style-type: none"> • Muscular System 	<ul style="list-style-type: none"> • Reading: TBD
L30-Wednesday	<ul style="list-style-type: none"> • Comparative muscular systems 	<ul style="list-style-type: none"> • Pre-quiz #8 via LMS, complete before midnight
L31-Friday	<ul style="list-style-type: none"> • Flight metabolism 	

Week 12 – April 11-15

L32-Monday	<ul style="list-style-type: none"> • Biomechanics – Terrestrial locomotion 	<ul style="list-style-type: none"> • Watch Video: How Flies Fly (3 parts). Featuring Michael Dickinson
L33-Wednesday	<ul style="list-style-type: none"> • Flight 	
L34-Friday	<ul style="list-style-type: none"> • Aquatic locomotion 	<ul style="list-style-type: none"> • Submit Exam Question on Assigned Topic via LMS (D), complete before midnight

Week 13 – April 18-22

L35-Monday	<ul style="list-style-type: none"> • Nervous System 	<ul style="list-style-type: none"> • Central Pattern Generating Networks in Insect Locomotion. Mantziaris et al. Dev. Neurobiology. V , 2020 (PDF link)
L36-Wednesday	<ul style="list-style-type: none"> • Nervous System - brain 	<ul style="list-style-type: none"> • Pre-quiz (#9) via LMS, complete before midnight
L37-Friday	<ul style="list-style-type: none"> • Nervous System – ganglia 	<ul style="list-style-type: none"> • Peer-review Exam Question on Assigned Topic (D), complete before midnight

Week 14– April 25-29

L38-Monday	<ul style="list-style-type: none"> • Sensory system • Mechanoreception 	<ul style="list-style-type: none"> • Evolution of Insect Color Vision: From Spectral Sensitivity to Visual Ecology. Van Der Kooi, et al. Ann Rev. Entomology V 66, 2021 (PDF link)
L39-Wednesday	<ul style="list-style-type: none"> • Mechanoreception (con't) 	<ul style="list-style-type: none"> • Pre-quiz (#10) via LMS, complete before midnight
L40-Friday	<ul style="list-style-type: none"> • Visual reception 	

Week 15– May 2-4

L41-Monday	Chemical Communication	• Submit Exam Question on Assigned Topic via LMS (E), complete before midnight
L42-Wednesday	Chemical Communication (con't)	• Peer-review Exam Question on Assigned Topic (E), complete before midnight

Final Exam – Friday, May 6, 1:30-4:30

Laboratory Schedule

General information About the Laboratory

Lab Meeting Times: We are scheduled to meet on Tuesdays 9:00 am to 11:50am. This time will always be available for completing experiments, but because of the nature of many of the projects, you may be required to work outside of this time as well. We will make every attempt to make sure that the lab space and supervision is available at times that work for everyone's schedule. Most of the projects will be done in groups, so everything should work out.

Meeting Place: We are scheduled to meet in 4072NHB, but a few of the projects will be completed in 317 Morrill Hall (M's Lab), the Beckman Institute, or elsewhere. You will be given plenty of notice about where different activities will take place.

Groups: For most lab projects you will be working in groups of 2 or 3 people. This way, the work can be spread out evenly and we can complete the experiments in a timely manner. However, each person is responsible for understanding all the procedures involved in each project and will be responsible for turning in their own assignments. Please let the instructors know if you have concerns about the group dynamics which could hamper your performance in the course.

SAFETY:

- Complete the DRS safety training: <https://www.drj.illinois.edu/#TRAINING>
- No mouth pipetting under any circumstances.
- Material Safety Data Sheets (MSDS) are available for all the chemicals we will be using.
- Use the hood for nasty smelling organic compounds. Be sure to avoid skin contact with chemicals especially fixatives, stains, solvents etc. Wear gloves.
- Make sure to dispose of all chemical waste properly (i.e. don't dump anything down the sink unless you're absolutely sure it's safe).
- Report any accidents and incidents as soon as possible to Dan or M, even if they seem trivial to you. Wipe up spills or other messes immediately. Note the locations of fire extinguishers and safety showers.

Week	Date	Lab #	Topic	Room	Assignment Due	Lab Quiz Due (before
------	------	-------	-------	------	----------------	----------------------

						lab meeting)
1	1/18	1	Intro / Insect Dissection	4072 NHB		
2	1/25	2	Scanning Electron Microscopy	Microscopy Suite – Beckman		Lab 1 Re-cap & Lab 2 Pre-lab
3	2/1	2&3	Scanning Electron Microscopy / Rearing <i>M. sexta</i>	4072 NHB		Lab 3 Pre-lab
4	2/8	2&3	Scanning Electron Microscopy / Rearing <i>M. sexta</i>	Independent group work		
5	2/15	2&3	Scanning Electron Microscopy / Rearing <i>M. sexta</i>	Independent group work	SEM lab report due	
6	2/22	4	Reproductive Lab	4072 NHB	<i>M. sexta</i> blog due	Lab 4 Pre-lab
7	3/1	4	Reproductive Lab	4072 NHB	<i>M. sexta</i> blog peer review due	
8	3/8	2	SEM Presentation	4072 NHB	1. SEM lab report re-write due 2. Reproductive lab report due	
9	3/22	5	Immunolabeling	4072 NHB		Lab 5 Pre-lab
10	3/29	5	Immunolabeling	4072 NHB		
11	4/5	6	Ramsay Assay	4072 NHB	1. Immunolabeling lab report due 2. In-class Ramsay assay report due	Lab 6 Pre-lab
12	4/12	7	Biomechanics lab	Microscopy Suite - Beckman		Lab 7 Pre-lab
13	4/19	7	Biomechanics lab	4072 NHB		
14	4/26	8	Insect Nervous System lab	4072 NHB	In-class Nervous System lab due	Lab 8 Pre-lab
15	5/3		Finish-up lab work / Clean up	4072 NHB	Biomechanics lab report due	

Learning Assessments and Course Assignments

Lecture and Lab Pre-Quizzes

Lecture Pre-Quiz: On the day we start a new broad topic (another physiological system) a pre-quiz is due that day before midnight. This pre-quiz will be low stakes but will help assess the level of knowledge the students in the class already have. That way I can adjust my subsequent lectures. The quiz will also assure that you have interacted with the introductory online lecture content. Before Spring Break the lecture pre-quizzes fall on Fridays, after Spring Break they fall on Mondays. The pre-quizzes will be administered through the course-website. You are welcome to work ahead and submit the quiz well before the due date.

10 lecture pre-quizzes, each quiz is 10 points = total of 100 points

Lab Pre-Quiz: Quizzes will be made available on the course-website immediately following the previous week's lab and will remain open until 9:00am of their associated lab. Please read all associated materials listed in the quiz section before attempting. You are allowed 3 attempts and will be graded on your highest scoring performance. The goal for this type of assessment is to ensure that you are prepared coming to lab and are aware of any hazards or pitfalls you may encounter.

8 lab pre-quizzes, each quiz is 10 points = total of 80 points

Exam Questions

Five times during the semester you will be assigned a subtopic related to the insect physiological system that was discussed in the previous weeks. Keeping this topic in mind you are tasked to write a Final exam question for another IB 427 student. You are to use lecture material (including the history of the field), your experiences in the laboratory, the required readings, and at least one recent (<5 year old) peer-reviewed, primary journal article to create the questions.

Exam questions should:

- Assess achievement of instructional objectives
- Accurately reflect the emphasis placed on important aspects of instruction
- Measure an appropriate level of student knowledge
- Vary in level of difficulty as the student moves through the question

A final exam question should be divided into 5 sections each

1. Multiple choice or true/false questions testing basic knowledge
2. Fill in the blank questions with at least 1 blank in a statement
3. Short answer questions
4. Extended response questions
5. Problem-solving question incorporating data from a primary journal article

The point distribution for this assignment is as follows:

- Creating a good-quality exam for another student following the template and instructions, with an accurate and complete key: up to 200 points.
- Peer-reviewing another student's exam, including the key: up to 50 points

Templates, a guide to writing effective test questions, and discussion boards available on the course website can be used to create an exam question.

(This assignment was inspired by FSHN 302 assignment created by Soo Lee.)

5 exam questions, each question is 50 points = total of 250 points
5 peer-reviews of questions, each peer-review is 20 points = total of 100 points

Final Exam

Exam Questions created by the students over the course of the semester will be used to for the Final Exam. Please be aware that questions may not be used verbatim. However, reviewing all the question generated should be a sufficient and comprehensive review for the Final exam.

1 Final Exam, total of 10 questions, each question 10 points = total of 100 points

Interview Project

The final project for the course will focus on the work of a currently active insect physiologist. The activity consists of multiple parts, some of which you may have to conduct concurrently:

1. You are assigned a currently active insect physiologist to research.
2. Write a post about the current research this physiologist is conducting based on 3 recent peer-reviewed papers, their website, news articles, blog posts, or postings regarding their work. Review other students' posts. (**Literature review post**)
3. Contact the researcher and interview them using a set of pre-determined course questions and questions you think are most interesting.
4. Create ~10 min podcast or video of what you have learned and what you want your peers to know about the researcher and their work. (**Podcast/Video**)
5. (assigned) Peer review of other students' final projects. (**Peer review of Project**)

Literature review post = total of 100 points
Podcast/video = total of 150 points
Peer review of project = total of 50 points

Social Media Post

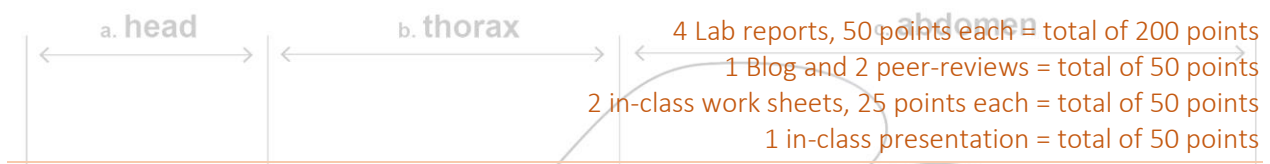
The class period before Spring Break the course has traditionally visited the Rare Books and Manuscript Library. You are tasked to create 5 social media posts (preferably on Twitter or Instagram) highlighting the Library, the books you viewed, the entomology department, and insects. A rubric to ensure good quality posts will be provided. (Use the #IB427 hashtag.)

5 posts, each post 5 points = total of 25 points

Laboratory Assessments

- Each student must submit individual formal reports for most laboratories. Please discuss your data and results with your group members, but the reports need to be your individual work.
- Reports should be in the format of a manuscript prepared in the style of the Journal of Experimental Biology. They should have the following sections: Introduction, Materials and Methods, Results, Discussion and References. Your lab report's pages should be numbered.

- Reports should be double-spaced. There will not be any mandatory page limit, as long as everything is discussed in sufficient detail. I expect 5-7 pages will probably be average.
- You must refer to the primary literature in at least your intro and discussion, you need at least 3 references. If you don't know how to find primary research articles, please talk to your TA.
- A blog rubric will be provided on the course website.
- In-class worksheets (which are distributed virtually) for some of the labs need to be completed and submitted electronically before the end of class.
- You are REQUIRED to put your UIN on your lab report instead of your name.
- Late submissions will lose points



Overall Course Grading

Lecture

Assignment	Points
Pre-lecture quizzes	100
Social media posts	25
Exam question (generation, peer-review)	350
Interview Project (literature review, podcast/video, peer-review)	300
Final Exam	100

Lab

Assignment	Points
Pre-lab quizzes	80
Lab reports	200
Blog and peer-review	50
In-class worksheets	50
In-class presentation	50

Total points = 1305

Grading for this course is based on absolute scale, such that:
 97% ≤ A+, 91% ≤ A < 97%, 89% ≤ A- < 91%
 87% ≤ B+ < 89%, 81% ≤ B < 87%, 79% ≤ B- < 81%...

Class Attendance & Participation

Attendance: 100% attendance is expected, and absences will detract from your grade. Please let me or the TA know immediately about conflicts due to conferences, research responsibilities, or prior scheduling conflict. Also, please email us if you are ill or have a family or medical emergency that will keep you from class.

COVID-19 protocols:

Everyone's safety is the number one priority so while we encourage everyone to meet in person as often as able, if you are showing symptoms of any illness, quarantined, or in mandatory isolation, please err on the side of caution and utilize the virtual class options we will try to provide. Your classmates, including the instructional team, may be at high-risk or have high-risk individuals they live with, care for, or visit. **Students who feel ill must not come to class.** The instructional team will reciprocate by meeting you virtually to go over class material.

When you do attend class in-person, please follow all current campus COVID safety protocols (<https://covid19.illinois.edu>), including the recommendation to use a KN95 or N95 mask. These are provided to all students free of charge (<https://union.illinois.edu/visit/covid-19-procedures>).

Participation and preparation: Rather than a traditional bell-to-bell lecture or laboratory, I want this course to be a dialogue or lively discussion of fascinating topics among close colleagues. In order to create this kind of learning environment, you MUST participate fully in each class. I expect you to have thoughtfully read the assigned material before each meeting. You should expect me to call on you; better yet, volunteer or raise your hand! Please feel free to ask me questions, add insights, correct my inaccuracies, and ask for clarification at any time during class.

Electronic device policy: Full participation in class activities is crucial for our learning and success. Electronic devices can enhance participation, but they can also become a distraction. Texting, taking phone calls, accessing social media, writing emails and conducting web searches on unrelated topics are not appropriate. Using your laptop, tablet or smart phone to make calculations, access relevant databases and take notes are encouraged. However, research studies have shown that students learn more and do better when they take notes by hand; therefore, I strongly encourage you to write out your notes.

Academic integrity: According to the Student Code, 'It is the responsibility of each student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions.' Please know that it is my responsibility as an instructor to uphold the academic integrity policy of the University, which [can be found here](#).

Expectations: Academic dishonesty will not be tolerated. Examples of academic dishonesty include the following: Cheating, Fabrication, Facilitating infractions of academic integrity, Plagiarism, Bribes & Threats, Academic interference, Examination by proxy, Grade tampering, Non-original works

Guidelines: Should an incident arise in which a student is thought to have violated academic integrity, the student will be processed under the disciplinary policy set forth in the

Illinois Academic Integrity Policy. If you do not understand relevant definitions of academic infractions, contact the instructor for an explanation within the first week of class.

Disability Accommodations

To ensure that disability-related concerns are properly addressed from the beginning of the course, students with disabilities who require assistance to participate in this class are asked to see the instructor as soon as possible. Also, to obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TTY), or e-mail a message to disability@illinois.edu.

Netiquette Statement (Courtesy of CITL)

In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. The following are tips for interacting online via e-mail or discussion board messages, adapted from guidelines originally compiled by Chuq Von Rospach and Gene Spafford (1995):

- Remember that the person receiving your message is someone like you, deserving and appreciating courtesy and respect
- Avoid typing whole sentences or phrases in Caps Lock
- Be brief; succinct, thoughtful messages have the greatest effect
- Your messages reflect on you personally; take time to make sure that you are proud of their form and content
- Use descriptive subject headings in your e-mails
- Think about your audience and the relevance of your messages
- Be careful when you use humor and sarcasm; absent the voice inflections and body language that aid face-to-face communication, Internet messages are easy to misinterpret
- When making follow-up comments, summarize the parts of the message to which you are responding
- Avoid repeating what has already been said; needless repetition is ineffective communication
- Cite appropriate references whenever using someone else's ideas, thoughts, or words

Inclusivity Statement (Courtesy of Robyn Deterding (AHS))

The effectiveness of this course is dependent upon the creation of an encouraging and safe classroom environment. Exclusionary, offensive or harmful speech (such as racism, sexism, homophobia, transphobia, etc.) will not be tolerated and in some cases subject to University harassment procedures. We are all responsible for creating a positive and safe environment that allows all students equal respect and comfort. I expect each of you to help establish and

maintain an environment where you and your peers can contribute without fear of ridicule or intolerant or offensive language.

Support Resources and Supporting Fellow Students in Distress

As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or yours, we encourage you to refer this behavior to the Student Assistance Center (1-217-333-0050) or online at odos.illinois.edu/community-of-care/referral/ Based upon your report, staff in the Student Assistance Center reaches out to students to make sure they have the support they need to be healthy and safe. Further, as a Community of Care, we want to support you in your overall wellness. We know that students sometimes face challenges that can impact academic performance (examples include mental health concerns, food insecurity, homelessness, personal emergencies). Should you find that you are managing such a challenge and that it is interfering with your coursework, you are encouraged to contact the Student Assistance Center (SAC) in the Office of the Dean of Students for support and referrals to campus and/or community resources. The SAC has a Dean on Duty available to see students who walk in, call, or email the office during business hours. For mental health emergencies, you can call 911 or contact the Counseling Center.

Misconduct Policy and Reporting

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options. A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here:

<https://wecare.illinois.edu/resources/students/#confidential>

Other information about resources and reporting is available here: wecare.illinois.edu/UIUC

Helpful note to students: Remember, the instructor and TAs are here to help you in any way to make you successful in this course. Please don't hesitate to make an appointment to see us virtually or in person, if you need any guidance or assistance to make learning from this course as meaningful as possible to you.