# PHYS 110 Fall 2018

4-4:50 PM, Mondays, Loomis 141

## **Required materials**

iClicker: purchase in the Illini Union Bookstore

#### **Instructors**

Ms. Merissa Jones
Physics Department Academic Advisor
majones2@illinois.edu
217-244-9524
Loomis 290W

Prof. Brian DeMarco
Associate Head for Undergraduate Programs
<a href="mailto:bdemarco@illinois.edu">bdemarco@illinois.edu</a>
217-244-9848

## **Course Description**

PHYS110 is your welcome and introduction to the University of Illinois Department of Physics! In this course, we will explore our student organizations and support resources, talk about how to succeed as a physics student, examine the physics curriculum, discuss the history of our fantastic department, review future career paths, and survey research opportunities for undergraduates.

Loomis 229

Being an excellent writer and communicator is central to success in physics and STEM careers. One of the most important ingredients to becoming an excellent writer is practice. Writing is also vital to develop critical thinking skills. We all think in words, but somehow putting the amorphous thoughts that rattle around in our heads into a grammatical construct that has a beginning, middle, and end clarifies and crystallizes our thinking in a way that nothing else can.

We have therefore integrated a simple write-to-learn component into PHYS110 to give you a head start on developing these skills that will be enormously important to your future success. Each week before class (by Sunday evening at 5:00 p.m.), we will ask you to read a short document, think about it, and write a brief answer to a question related to that reading material. We have worked hard to find relevant readings and to design questions that will challenge you to think about and apply concepts contained in the materials. Please approach these exercises not as just another chore to get through, but as a chance to exercise your thinking chops and improve your writing.

**Check your illinois.edu email account every day.** We will communicate important announcements and reminders to your illinois.edu email account.

**Attend class and participate.** Attending class each week will help you get the most out of PHYS110. You will earn participation points that will count towards your Satisfactory/Unsatisfactory grade for PHYS110 by using your iClicker during class.

# Schedule

Date	Lecture / Topic	Speakers	
8/27	Welcome	Matthias Grosse Perdekamp	
	Physics Student Organizations	Society of Physics Students (SPS)	
		Society for Women in Physics (SWIP)	
		Physics Van	
		Physics International (PI)	
		Guidance for Physics Students (GPS)	
		Student Advisory Board (PHYSAB)	
		Society for Underrepresented Physics Students	
		(SUPS)	
	Pizza Party (5-7 pm)		
9/3	Labor Day (No class)		
9/10	Study & Time Management Skills	Elaine Schulte	
	(How to be Successful in Physics)		
9/17	Physics Curriculum	Merissa Jones	
	DARS, Technical Electives, Minors,	Brian DeMarco	
	Double Majors, Dual Degrees		
9/24	Support Services	Dana Tempel	
	Counseling Center, DRES, Center for	Brian DeMarco	
	Academic Resources in Engineering		
	(CARE), Emergency Dean		
10/1	Nuts & Bolts of Being a University of	Brian DeMarco	
	Illinois Physics Student	Merissa Jones	
	Academic integrity, dropping & with-	PHYSAB student panel	
	drawing from a class, incompletes &		
	grade replacement, proficiency exams		
	& policies, transfer credit, enrolling in		
	graduate courses, independent study		
10/8	History & Traditions of the University	Celia Elliott	
	of Illinois Department of Physics		
10/15	Careers in Physics	Brian DeMarco	
		Engineering Career Services (ECS)	
10/22	Undergraduate Research and Oppor-	Faculty Panel	
	tunities		

There will be no final exam in PHYS110.

## Grading

Your grade in PHYS110 will be either satisfactory (S) or unsatisfactory (U). Two **required assignments** must be completed to receive an S:

You **must** complete the Division of Research Safety online Laboratory Safety Training (<a href="https://www.drs.illinois.edu/Training/TrainingPassThrough?id=67">https://www.drs.illinois.edu/Training/TrainingPassThrough?id=67</a>) and email the certificate of completion to majones2@illinois.edu by 10/22/2018.

You **must** introduce yourself to your faculty mentor, who has been assigned to you by Merissa Jones. You can contact your mentor via email or track him or her down in person. Ask your mentor to sign a form that you will pick up from Merissa Jones. You must submit the signed and dated form to Merissa Jones by 10/22/2018.

To receive an S, you must also score at least 500 total points out of a maximum possible 1000 points by completing pre-lecture Checkpoints and by using your iClicker in class.

### **Checkpoints (700 possible points)**

You will be given a reading and a "Checkpoint" writing assignment to complete by 5:00 pm on the Sunday before each class. Your answers to the Checkpoint questions will be evaluated according to the following rubric:

	S (100 pts)	S <sup>-</sup> (80 pts)	U (30 pts)
Clarity	Ideas are clear, precise, and detailed	Some ideas are ambiguous or undeveloped	Hard to understand the writer's points
Coherence and Conciseness	Logical organization; straightforward and to the point	Lacks strong logical organization; somewhat wordy and repetitive	Disorganized random thoughts; extremely wordy and repetitious
Tone and Execution	Professional tone; free of mechanical errors*	Somewhat informal for academic writing; mechanical errors detract from professional appearance	Excessive use of slang and colloquialisms; many mechanical errors that interfere with understanding

<sup>\*</sup>grammar, spelling, word choice, punctuation

#### iClicker (300 possible points)

iClickers are an electronic personal response device that enables you to answer multiple choice questions during class. Your introductory physics classes and many other courses around campus will use iClickers. iClickers are terrific way to interact with the instructor and your peers!

You earn iClicker points in PHYS110 through participation. You will receive 60 points for every class meeting where you answer at least one iClicker question.

### **Excused Absences**

Excused absences will be granted and documented in accordance with University policy as described in Article 1, Part 5 Class Attendance, of the Student Code.

Excused absences fall into the following categories as defined by the code:

- illness
- emergency beyond the student's control (e.g., an auto accident or death in the family)
- required attendance at a University event (e.g., varsity athletics)
- religious observance or practice
- serving as a volunteer emergency worker

The <u>Excused Absences application</u> will guide you through the procedure for documenting missed classes, including the effects of the absence on your grade.

## **Academic Integrity**

All activities in this course are subject to the Academic Integrity rules as described in <u>Article 1</u>, Part 4, Academic Integrity, of the Student Code.

Infractions include, but are not limited to:

- cheating, such as asking another student to use your iClicker in class if you are absent
- plagiarism, such as using verbatim text from another source (such as Wikipedia or other websites) to answer the Checkpoint questions
- facilitating infractions of academic integrity, e.g., allowing others to copy your Checkpoint answers
- fabrication, such as forging your mentor's signature
- academic interference
- computer-related infractions
- unauthorized use of university resources
- sale of class materials or notes, including submitting material or notes to websites that promote cheating

Violations of any of these rules will be pursued as academic misconduct and reported to your home college. All aspects of the course are covered by these rules, including:

- iClickers
- Checkpoints
- documentation submitted for petition for an excused absence