# Syllabus PHYS 2997 Teaching of Physics - Fall 2020

#### **Course Information**

CRN	22074			
Location	121 Alumni Hall (https://pitt.zoom.us/j/92103741036, password 22074)			
Time	Friday 3:25 – 5:15 pm			
Instructor	Russell J. Clark, Ph.D.			
Email	ruc2@pitt.edu			
Phone	412-624-9204			
Office	OEH 404 ( <u>https://pitt.zoom.us/j/7744079497</u> )			
Office hours	Monday:	3:00pm – 4:00pm		
	Wednesday:	9:00am – 10:00am		
	Thursday:	12:00pm – 1:00pm		
	Friday:	9:00am – 10:00am		
Office hours will be conducted by Zoom, unless otherwise noted.				
Other times by appointment: <u>https://www.appointmentquest.com/scheduler/2150061337</u>				

#### **Course Description**

The overall objective of this course is to prepare incoming graduate students for their duties as Teaching Assistants (TAs) and lay the foundation for any subsequent teaching role they may assume. This course will introduce students to the principles of learning and physics education research-based curricular and pedagogical approaches using concrete examples. There will be opportunity to reflect upon various aspects of the course and teaching and learning in general.

The grade for the course is either credit or no credit (pass/fail). The following are requirements for the course.

- $\checkmark$  You must fully complete all the assignments and activities by the assigned dates.
- ✓ You must participate in all class discussions and activities either synchronously or asynchronously.

#### **Internet Access**

Internet access for this course is provided through the Canvas system. This is a portal used for many different courses at the University of Pittsburgh and is basically a communications tool between the instructor and the students. Through Canvas you may send email to your instructor, view your grades and download course materials such as the syllabus. You will also find announcements, upcoming activities and class assignments. Use the following link to access Canvas: <u>https://canvas.pitt.edu/</u>.

#### Schedule

Lecture	Date	Topic or Activity	Homework
1	08/21	Student introductions Lecture on the basics of teaching Faculty Mentoring Program (4pm)	
2	08/28	TA Training Module 1: Socratic Questioning exercise Problem Writing Exercise 1	Problem Writing 1
3	09/04	TA Training Module 2: Learning Culture videos Problem Writing Exercise 2	Problem Writing 2
4	09/11	TA Training Module 3: Bias in the classroom Problem Writing Exercise 3	Problem Writing 3
5	09/18	Lecture on audience awareness Breakout Room Exercises (3)	
6	09/25	Lecture on grading Breakout Room Exercises (3)	
7	10/02	Lecture on new pedagogies Breakout Room Exercises (4)	
8	10/09	Breakout Room Exercises (5)	
9	10/16	Breakout Room Exercises (5)	
10	10/23	Teaching Presentations (5)	
11	10/30	Teaching Presentations (5)	Presentation Feedback
12	11/06	Teaching Presentations (5)	Presentation Feedback
13	11/13	Teaching Presentations (5)	Presentation Feedback
14	11/20	Reflections	Presentation Feedback

#### Grading

The course grade for this class is S/NC, which means pass (S) or fail (NC). You will not receive a letter grade for this class. You will be given points (see the table below) for participation in and completion of the class assignments. You will only receive a grade of S (pass) if your final score is 90% or above.

Assignment	Description	Points
Attendance or Discussion	Attend class synchronously (in-person or online), or submit a written summary of the class discussions.	
Problem Writing Exercise	Participate synchronously or asynchronously in problem writing exercises.	
Zoom Breakout Room Activity	Prepare and present an activity that uses Zoom breakout rooms.	200
Teaching Presentation	Prepare and give a presentation that teaches a topic of your choice in physics and/or astronomy	200
Peer Feedback on Presentations	Provide peer feedback on the teaching presentations.	$20^{1} \times 10$ = 200
		890

<sup>&</sup>lt;sup>1</sup> Depends on the number of students enrolled in the class.

## **Asynchronous Participation**

You are strongly encouraged to participate synchronously in this course.

However, if you are unable to participate synchronously due to circumstances beyond your control, then you may participate in the class discussion by submitting a 500 word (minimum) paper on the class topic. You will be responsible for doing the research on the topic, through you will be welcome to contact Dr. Clark to ask questions, get basic information, etc.

If you are participating asynchronously in the problem writing exercises, then a question from one of your peers will be provided to you. After you have thought about the question, you will send your feedback comments to Dr. Clark so that he can pass them on to the author.

If you are participating asynchronously for the teaching presentation, then record and submit a video of your presentation before your scheduled date.

If you are participating asynchronously for the Zoom breakout room activity, then submit a scripted version of the activity. If possible, ask one of your fellow students to run the activity. If none are willing or able to do this then ask Dr. Clark to run the activity.

## **Academic Integrity**

Students in this course will be expected to comply with the <u>University of Pittsburgh's Policy on Academic</u> <u>Integrity</u>. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy. Furthermore, no student may bring any unauthorized materials to an exam, including dictionaries and programmable calculators.

To learn more about Academic Integrity, visit the <u>Academic Integrity Guide</u> for an overview of the topic. For hands- on practice, complete the <u>Understanding and Avoiding Plagiarism tutorial</u>.

## **Disability Services**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and <u>Disability Resources and Services</u> (DRS), 140 William Pitt Union, (412) 648-7890, <u>drsrecep@pitt.edu</u>, (412) 228-5347 for P3 ASL users, as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

## Health and Safety Statement

In the midst of this pandemic, it is extremely important that you abide by public health regulations and University of Pittsburgh health standards and guidelines. While in class, at a minimum this means that you must wear a face covering and comply with physical distancing requirements; other requirements may be added by the University during the semester. These rules have been developed to protect the health and safety of all community members.

Failure to comply with these requirements will result in you not being permitted to attend class in person and could result in a Student Conduct violation. For the most up-to-date information and guidance, please visit coronavirus.pitt.edu and check your Pitt email for updates before each class.

#### **Remote Instruction**

This class will be offered in-person and through Zoom when the University is in the Guarded or Elevated postures. This course will only be offered through Zoom when the University is in the High Risk posture.

#### **Statement on Classroom Recording**

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.

## **Email Communication**

Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g., Hotmail, AOL, Yahoo). Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from their university e-mail address.

## Title IX:

Legal text: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." As a professor, I am a mandatory reporter and I am required to report violations of Title IX that I observe, or am made aware of, to the Title IX office. Title IX violations include, but are not limited to, sexual harassment, sexual violence and verbal or sexual abuse. Within the classroom, behavior in violation might appear as suggestive jokes or innuendos, inappropriate touching, and unwanted sexual behavior or advances, but my capacity and obligation to report does not end at the classroom.