

# Syllabus PHYS 2997 Teaching of Physics Fall 2019

## Course Information

CRN	22768
Location	104 Thaw Hall
Time	Friday 3:00 – 4:50 pm
Instructor	Russell J. Clark, Ph.D
email	ruc2@pitt.edu
Phone	412-624-9204
Office	OEH 404
Office hours	Monday: 1:30pm – 2:30pm Tuesday: 4:30pm – 5:30pm Wednesday: 3:00pm – 4:00pm Thursday: 2:00pm – 3:00pm Friday: 7:00am – 8:00am

Other times by appointment: <http://tinyurl.com/Russell-Clark-Appointments>

## Course Description

This is a mandatory course for all physics graduate students. 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.

- ✓ You must fully complete all the assignments and activities by the assigned dates.
- ✓ You must participate in all class discussions and activities.

## Internet Access

Internet access for this course is provided through the Courseweb 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 Courseweb you may send email to your instructor or the UTA, 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 Courseweb: <http://courseweb.pitt.edu>. Once there, login using your Pitt email username and password. If you do not know your username and password, contact the computer help desk (412-624-4357 or 4-HELP). After you login you will see links for all of your courses that participate in Courseweb. Simply click on the link for this course.

## Schedule

Lecture	Date	Topic or Activity	Description	Homework
1	08-30	Introduction Lecture Role-play (1) Surveys	Student introductions Lecture on the basics of teaching Student/Instructor role-play exercise Standard Inventory Exam (STPFASL) CSEM Exercise	Pre-Teaching Survey
2	09-06	Role-play (2) TA Training Module 1	Student/Instructor role-play exercise Socratic Questioning exercise	
3	09-13	Role-play (2) TA Training Module 2	Student/Instructor role-play exercise Learning Culture videos	
4	09-20	Role-play (2) TA Training Module 3	Student/Instructor role-play exercise Bias in the classroom	
5	09-27	Role-play (1) Lecture Problem Writing	Student/Instructor role-play exercise Lecture on audience awareness Problem writing exercise	
6	10-04	Role-play (1) Lecture Problem Writing	Student/Instructor role-play exercise Lecture on grading Problem writing exercise	
7	10-11	Role-play (1) Lecture Problem Writing	Student/Instructor role-play exercise Lecture on new pedagogies Problem writing exercise	
8	10-18	Problem Writing Presentations (3)	Problem writing exercise Teaching presentations	
9	10-25	Problem Writing Presentations (3)	Problem writing exercise Teaching presentations	
10	11-01	Problem Writing Presentations (3)	Problem writing exercise Teaching presentations	
11	11-08	Problem Writing Presentations (3)	Problem writing exercise Teaching presentations	
12	11-15	Presentations (5)	Teaching presentations	
13	11-22	Presentations (3)	Teaching presentations	Post-Teaching Survey
	11-29	<b>Thanksgiving Break</b>	<b>No class</b>	
14	12-06	Presentations (5)	Teaching presentations	Write a letter To a future Student.
	12-14	<b>Final Exam Week</b>	<b>No class</b>	

## 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 185 or above.**

Note that you will only be allowed to makeup missed work if you have an excused absence. If you have to miss class due to illness or a family emergency then you may be asked for documentation, such as a note from your doctor. If you know that you will have to miss class due to attending a conference or some other compelling reason, then you should discuss this with the instructor ahead of time.

Assignment	Description	Points
Attendance	You will receive 10 points for class participation in each class meeting. If you show up for class, but do not participate then you may receive fewer than 10 points. Note that this includes the dB-SERC TA training seminar.	140
In Class Assignments	Throughout the semester you will be given short assignments to complete in class. The number of points per assignment will vary but collectively they will be worth 10 points.	10
Homework	Throughout the semester you will be given assignments to complete outside of class. The number of points per assignment will vary but collectively they will be worth 10 points.	10
Presentation (15 minutes)	You will teach an assigned topic from introductory physics. Your peers will provide feedback on your presentation.	20
dB-SERC Lunch	You must attend at least 1 dB-SERC lunch during the semester. These are scheduled on Mondays from 12-1pm. If you have a schedule conflict for this time, then contact Dr. Clark for an alternate assignment.	10
Letter (1 or 2 pages)	Write a letter to a future student in this course. Explain what aspects of the course that you think will be most beneficial and why.	10
		200

## **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 the Office of Disability Resources and Services (DRS), 140 William Pitt Union, 412-648-7890, drsrecep@pitt.edu, 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.

## **Academic Integrity**

Take time to read the information on “Academic Integrity” and be sure that you understand your responsibilities under the guidelines set out for The Dietrich School of Arts and Sciences, which are spelled out in full at <http://www.as.pitt.edu/fac/policies/academic-integrity>.

## **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.

## **Code of Conduct:**

Communication is key to a productive learning environment, and we can maintain productive communication by exhibiting respect for one another. The success of the course for yourself and others depends on all of our commitment to behavior that demonstrates respect for differences, understanding towards others and a willingness to listen and learn. For these reasons, it is unacceptable to harass, discriminate against, or abuse anyone because of race, ethnicity, gender, disability, religious affiliation, sexual orientation, or age. If you witness or are subject to such harassment, please report it to the instructor or to the Office of Diversity and Inclusion.

## **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.

## Useful Information

The following links and locations may be useful to you.

Resource	Location	Link
Campus Building Index		<a href="http://www.tour.pitt.edu/locations">http://www.tour.pitt.edu/locations</a>
Academic Resource Center	G-1 GSCC	<a href="http://www.asundergrad.pitt.edu/arc">http://www.asundergrad.pitt.edu/arc</a>
Writing Center	317B O'Hara Student Center	<a href="http://www.writingcenter.pitt.edu/">http://www.writingcenter.pitt.edu/</a>
Math Assistance Center	215 O'Hara Student Center	<a href="http://www.mathematics.pitt.edu/about/math-assistance-center">http://www.mathematics.pitt.edu/about/math-assistance-center</a>
School of Arts and Sciences	Thackeray Hall	<a href="http://www.asundergrad.pitt.edu/">http://www.asundergrad.pitt.edu/</a>
Advising Center	201 Thackeray Hall	<a href="http://www.asundergrad.pitt.edu/advising-center">http://www.asundergrad.pitt.edu/advising-center</a>
Office of Student Records	140 Thackeray Hall	<a href="http://www.asundergrad.pitt.edu/offices/student-records.html">http://www.asundergrad.pitt.edu/offices/student-records.html</a>
Registrar	G-3 Thackeray Hall	<a href="http://www.registrar.pitt.edu/">http://www.registrar.pitt.edu/</a>
Office of Career Development and Placement Assistance	200 WPU	<a href="http://www.studentaffairs.pitt.edu/cdpa">http://www.studentaffairs.pitt.edu/cdpa</a>
Study Abroad Office	802 WPU	<a href="http://www.abroad.pitt.edu">http://www.abroad.pitt.edu</a>
Counseling Center	Suite 334 WPU	<a href="http://www.studentaffairs.pitt.edu/cchome">http://www.studentaffairs.pitt.edu/cchome</a>
Campus Computing Labs		<a href="http://technology.pitt.edu/about-us/lab-locations-hours-and-equipment">http://technology.pitt.edu/about-us/lab-locations-hours-and-equipment</a>