
Syllabus for PHYS 8001 - Practicum of Teaching Physics

Instructor:

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Disability Statement: This course is open to all students who meet the academic requirements for participation. Any student who has a need for accommodation based on the impact of a disability should contact the instructor privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at 215-204-1280 in 100 Ritter Annex to coordinate reasonable accommodations for students with documented disabilities.

Statement on Academic Freedom: Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed online.

Course Goals

1. Apply theories and research findings on learning and development to the teaching of physics.
2. Use a variety of effective teaching methods to address all learners effectively.
3. Apply the principles of integrated course design to develop syllabi, assessments, and individual lesson plans.
4. Develop a reflective and purposeful approach to teaching.

Course Content

<u>Week</u>	<u>Content</u>
1	Introduction to Temple University Physics Labs
2	Prior Knowledge and Organizing Knowledge
3	Motivation and Mastery
4	Adult Development & Metacognition
5	Integrated Course Design and Developing Learning Goals
6	Designing Assignments and Exams to Align with Learning Goals
7	Assessment and Feedback
8	Effective Lecturing & Large Group Teaching
9	Collaborative Learning: Discussions and Problem Solving
10	Inclusion
11	Dealing with Challenging Situations and Students
12	Reflective Practice I: Reflecting on Faculty Identity
13	Reflective Practice II: Reflecting on teaching practice
14	Ethics in Science Research

Course Text

Assigned readings will come from a variety of research journals as well as the text "How Learning Works" by Ambrose et al.

Assessment

This is a pass/fail course. Assessment is based on active participation and regular attendance of all class periods.