

227-0662: Organic and Nanostructured Optics and Electronics Class Information

Time: Tuesdays 13:15-17:00

Location: RZ F21

The program for each class is provided on the syllabus. The lectures in Weeks 3-9 will follow this format:

13:15-13:45 discussion & quiz

13:45-14:30 lecture

14:30-14:45 15 minute break

14:45-15:30 lecture

15:30-15:45 15 minute break

15:45-17:00 discussion

These components are described below.

Mini Quizzes

To make sure that you understand the key concepts in the class, a quiz will be given on the material covered the previous week(s). There will be 5 quizzes. These can be graded or ungraded. See below.

Laboratory

In two, 1.5 hour laboratory sessions, you will have the opportunity to synthesize nanocrystals, fabricate a nanocrystal-based solar cell, and characterize it. Participation in the two laboratory sessions counts towards your final grade.

Final Project

The goal of the final project is to critically evaluate a published article. You will be asked to submit a written report (maximum 10 pages, double spaced, 12 pt. font) and give a conference-style presentation (12 minute talk; 3 minutes for questions) to the class in which you are to (1) place the article in the context of other published work, (2) critique its findings (are there inconsistencies?, other explanations for the data?, other experiments that should have been done?), and (3) suggest possible next steps for researchers in the field. A list of acceptable papers on different topics will be provided by Prof. Wood. Two students may not present on the same paper.

Grading

10% participation in laboratories.

Option 1: 30% quizzes and 60% final project (30% written report and 30% presentation).

Option 2: 90% final project (45% written report and 45% presentation).