

**Course Outline for Physics 116A**

<u>Topic</u>	<u>Reading</u>
1. Infinite series and power series	Boas, Chapter 1
2. Complex numbers and complex functions	Boas, Chapter 2
3. Matrices, linear algebra and vector spaces	Boas, Chapter 3
4. Eigenvalue problems and matrix diagonalization	Boas, Chapter 3
5. Ordinary Differential Equations	Boas, Chapter 8

**Course Grading and Requirements**

45% Weekly Homework (9 problem sets)

20% Midterm Exam (Tuesday, November 5, 2019, 1:30–3:05 pm)

35% Final Exam (Thursday, December 12, 2019, 12–3 pm)

Homework assignments will be posted on the course website on a weekly basis, and are due each Thursday at the beginning of class. (Due to the Thanksgiving holiday, the final two homework sets will be due on the two Tuesdays following Thanksgiving.) The homework problem sets are not optional. You are encouraged to discuss the class material and homework problems with your classmates and to work in groups, but all submitted problems should represent your own work and understanding. In order that homework can be graded efficiently and returned quickly, there will be a 50% penalty for late homework. This penalty may be waived in special circumstances if you see me before the original due date. Homework solutions will be made available one or two days after the official due date; no late homeworks will be accepted after that.

The midterm and final exams will be held in the same classroom as the lectures. The final exam will be three hours long and cover the entire course material. You must take the final exam to pass the course. You will be permitted to consult the class textbook, your own handwritten notes, and any class handout during the exams.