

<b>Instructor:</b>	Professor Gregory Howes
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<b>Office Hours:</b>	1:00–2:00pm W, 9:45am–11:45am Th, or by appointment
<b>Department:</b>	Physics & Astronomy, 203 Van Allen Hall, Prof. Fred Skiff, Chair
<b>Catalog Description:</b>	Functions of complex variables, integration methods, linear vector spaces, tensors, matrix algebra.
<b>Lectures:</b>	Wednesday and Friday, 2:00–3:15pm 618 Van Allen Hall
<b>Required Textbook:</b>	Arfken, Weber, & Harris, <i>Mathematical Methods for Physicists</i> , 7th edition
<b>Recommended Reference:</b>	Spiegel, Lipschutz, & Liu, <i>Schaum's Outlines: Mathematical Handbook of Formulas and Tables</i> , 4th edition
<b>Web Page:</b>	<a href="http://homepage.physics.uiowa.edu/~ghowes/teach/phys4761/index.html">http://homepage.physics.uiowa.edu/~ghowes/teach/phys4761/index.html</a>
<b>Exams</b>	<b>Two Midterm Exams:</b> Tentatively on Friday, Oct 5 and Friday, Nov 16 <b>Final Exam:</b> To be announced by Registrar in mid-September
<b>Grading:</b>	Homework: 20% Two Midterm Exams: 20% each Final Exam: 40%
<b>Homework:</b>	Homework will be assigned weekly, due on Friday mornings at the beginning of lecture. Late homework will not be accepted. Working through the homework problems is a critical step in learning the course material. You are encouraged to work together in groups on the homework, but each student must write his or her own solutions; you may discuss how to solve the problem together, but you may not copy another student's solution.
<b>Symbolic Solvers:</b>	The only way to learn to use advanced mathematical methods is to actually apply them yourself. Thus, you are not allowed to use symbolic solvers (Mathematica, Maple, etc.) to do your homework. You may check your answers with this software, if you wish, but the homework that you submit must have the solutions written out by hand to demonstrate that you actually solved problem yourself, otherwise you will get at most half credit for that problem.
<b>Topics:</b>	Chapters 1–10 and 23 of Arfken, Weber, & Harris in PHYS:4761.

## **The College of Liberal Arts and Sciences Policies and Procedures**

### **Administrative Home**

The College of Liberal Arts and Sciences (CLAS) is the administrative home of this course and governs its add/drop deadlines, the second-grade-only option, and other policies. These policies vary by college (<https://clas.uiowa.edu/students/handbook>).

### **Electronic Communication**

Students are responsible for official correspondences sent to their UI email address (uiowa.edu) and must use this address for all communication within UI (Operations Manual, III.15.2).

### **Accommodations for Disabilities**

UI is committed to an educational experience that is accessible to all students. A student may request academic accommodations for a disability (such as mental health, attention, learning, vision, and physical or health-related condition) by registering with Student Disability Services (SDS). The student should then discuss accommodations with the course instructor (<https://sds.studentlife.uiowa.edu/>).

### **Nondiscrimination in the Classroom**

UI is committed to making the classroom a respectful and inclusive space for all people irrespective of their gender, sexual, racial, religious or other identities. Toward this goal, students are invited to optionally share their preferred names and pronouns with their instructors and classmates. The University of Iowa prohibits discrimination and harassment against individuals on the basis of race, class, gender, sexual orientation, national origin, and other identity categories set forth in the University's Human Rights policy. For more information, contact the Office of Equal Opportunity and Diversity at [diversity@uiowa.edu](mailto:diversity@uiowa.edu) or [diversity.uiowa.edu](http://diversity.uiowa.edu).

### **Academic Integrity**

All undergraduates enrolled in courses offered by CLAS have, in essence, agreed to the College's Code of Academic Honesty. Misconduct is reported to the College, resulting in suspension or other sanctions, with sanctions communicated with the student through the UI email address.

### **CLAS Final Examination Policies**

The final exam schedule for each semester is announced around the fifth week of classes; students are responsible for knowing the date, time, and place of a final exam. Students should not make travel plans until knowing this final exam information. No exams of any kind are allowed the week before finals.

(<https://clas.uiowa.edu/faculty/teaching-policies-resources-examination-policies>.)

### **Making a Complaint**

Students with a complaint should first visit with the instructor or course supervisor and then with the departmental executive officer (DEO), also known as the Chair. Students may then bring the concern to CLAS

(<https://clas.uiowa.edu/students/handbook/student-rights-responsibilities>).

### **Understanding Sexual Harassment**

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community must uphold the UI mission and contribute to a safe environment that enhances learning. Incidents of sexual harassment must be reported immediately. For assistance, definitions, and the full University policy, see <https://osmrc.uiowa.edu/>.