Physics 5930 Theoretical Mechanics; CRN 33179; Section 01
Spring Term 2018
This is an “oral intensive” class and hence carries the Hamline Plan letter “O”.
This is a “problem-solving” and conceptual understanding class (no lab).
Class Hours: 10:20 AM to 11:20 AM, MWF, RSC 130

Course Specific Learning Outcomes:
Out of the following list of departmental learning outcomes, those covered by this course are in bold below:

- Students will demonstrate a thorough understanding of general and modern physics.
- **Students will demonstrate a fundamental understanding of advanced physics topics.**
- Students will design, perform and interpret an insightful physics experiment.
- Students will communicate physical concepts and experimental details.
- Students will collaborate as part of a scientific team.
- **Students will apply math and technology tools to problem solving.**
- Students will demonstrate the ability to model a physical system using current computational and analytical techniques.

Office Phone: 651 523 2256   Home Phone: 651 646 4109 (before 10 PM)
Outside 1 Hour Group Help Session: Available upon request.
Office Hours:   Mon., Wed., Fri.: 9:00 AM to 10 AM;   Tues., Thurs: 2:00 – 3:30 PM
email: jartz@hamline.edu   webpage: http://physics.hamline.edu/~jartz

Regular Exams
Exam dates are March 2, April 2, and May 9. All exams are closed book.

Course Grade:

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90% - 100%</td>
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<tr>
<td>B</td>
<td>80% - 89%</td>
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<tr>
<td>C</td>
<td>70% - 79%</td>
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<tr>
<td>D</td>
<td>60% - 69%</td>
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Course Expectations:
1. **Homework**: Help permitted from each other and from instructor. Honor system: “Don’t dare turn in something that you do not understand or that you have copied from someone else or from the internet; do your own work but check with others if you get stuck.
2. **Three Tests**: Each will have a closed book component and an oral exam component: The closed book is using those main concepts & principles that “every young physicist should know” and carry around with them; the oral component includes groups of 3 or 4 with common “take-off” questions and student examiners. Each student gets ~15 minutes.
3. **Final Exam**: Oral or written (to be decided later). If we decide upon an oral exam, each member of the class will get 25 minutes to respond to questions.

Relative Weighting:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
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<tr>
<td>Three tests</td>
<td>60%</td>
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<tr>
<td>Final Exam</td>
<td>15%</td>
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<tr>
<td>Attendance/Participation</td>
<td>5%</td>
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Have fun; work hard, and good luck, everyone! J.Artz
1. **IMPORTANT DATES for YOUR REFERENCE and/or YOUR SYLLABUS**
   - Tuesday, February 6 - Last day to ADD or DROP (without "W") **first half-of-term (1H) classes**
   - Tuesday, February 13 - Last day to ADD or DROP (without "W") **full term classes**
   - Wednesday, February 28 - Last day to WITHDRAW from 1H classes
   - Monday, March 19 to Friday, March 23 - Midterm break (classes resume Monday, March 26)
   - Thursday, March 29 - Midterm and first half-of-term grade deadline (noon)
   - Monday, April 2 - Last day to ADD or DROP (without "W") **second half-of-term (2H) classes**
   - Wednesday, April 18 - Last day to WITHDRAW from full-term classes (Please add this date to your syllabus to help inform students of this deadline)
   - Wednesday, April 25 - Last day to WITHDRAW from 2H classes
   - Friday, May 11 - Spring Classes End
   - Monday, May 14 through Thursday, May 17 - Final Exams
   - Saturday, May 19 - Commencement
   - Thursday, May 24 - Final grade deadline (noon)

2. **FINAL EXAM SCHEDULE and ACADEMIC CALENDARS**
   Final exam times are listed on the Piperline class schedule! Please check the schedule ([www.hamline.edu/classsschedules](http://www.hamline.edu/classsschedules)). The complete 2017-18 academic calendar (as well as planning calendars through 2020), the grading calendar, and the final exam schedule can be found at [http://www.hamline.edu/registration-records/calendars](http://www.hamline.edu/registration-records/calendars).

3. **Disability statement:**
   If you have a documented disability for which accommodations may be required in this class, please contact Steve Anderson (sanderson65@hamline.edu) or Lyndsay Testa in Disability Resources (651-523-2740, West Hall 108) as soon as possible to discuss accommodations. If you have already arranged accommodations through Disability Resources, please ensure submission of your accommodation letter within the first two weeks of class. Accommodations will only be provided after the letter is submitted to me and with sufficient lead-time for the disability office to arrange testing or other accommodations. Although I will receive the letter electronically, the disability office expects you to initiate a conversation with me about the accommodations.

4. **Sexual Assault, Relationship Violence, and Stalking**
   Hamline University provides academic and other accommodations to students who have experienced sexual assault, relationship violence (physical, emotional, or other form of abuse by a dating or other intimate partner), or stalking. For more information about Hamline's policy and the resources available to you, consult Hamline’s Sexual Misconduct Support and Prevention offices, Title IX Coordinator and Dean of Students Patti Klein (pklein01@hamline.edu, 651-523-2421, West Hall 106), and/or Sexualities & Gender Diversity; Deputy Title IX Coordinator of Diversity Initiatives T. Aaron Hans (jahans@hamline.edu, 651-523-2380, 317A Anderson Center).

5. **Academic honesty**
   Every member of the Hamline University community—students, faculty, administrators, and staff—is responsible for upholding the highest standards of academic integrity at all times. The assumption that academic work is an honest reflection of one’s knowledge and skills is fundamental to the integrity of Hamline University and to the value of a Hamline diploma. If students at an institution of higher education develop a reputation for receiving grades based on honest work, GPAs and academic degrees held by all students from that institution are valued more highly. The faculty subscribe to standards of academic honesty in their research and teaching. Every person in the University is responsible for adhering to the principles of the Academic Honor Code. Students should note that academic dishonesty, including but not limited to plagiarism, is not tolerated either at Hamline University or in the academic community at large. Direct quotes and paraphrases must be acknowledged as such and properly cited. The failure to do so is considered academically dishonest; anyone found guilty of academic dishonesty will be given a failing grade for the entire course (with no option to withdraw from the course). There may be college-level or university-level investigations or consequences as well. See the Hamline University Academic Honor Code: [https://www.hamline.edu/policies.aspx](https://www.hamline.edu/policies.aspx).

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**IMPORTANT DATES for YOUR REFERENCE and/or YOUR SYLLABUS**

**FINAL EXAM SCHEDULE and ACADEMIC CALENDARS**

**Disability statement:**

**Sexual Assault, Relationship Violence, and Stalking**

**Academic honesty**