PHYS 4102
Theoretical Mechanics II
Course Syllabus and Schedule for Spring 2010

Instructor:  Dr. Chad Fertig
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eCommons Course

Times and Locations
Class: T-Th  (11:00 AM -12:15 PM), Physics Bldg., Room 327
Office Hours: M 12:00-3:00 and by appointment.

Required Textbooks

Homework
Homework sets (approximately one per chapter) are due at 4:00 on the days given on the
class schedule.  Homework 1 day late will be penalized by 15%, 2 days late by 30%, and
more than 3 days late will not be accepted.  Your lowest homework score will be dropped
from your course average.  No other allowances will be made for late or missed homework.
Your homework average constitutes 30% of your course grade.

Homework study groups are strongly encouraged, but you must hand in your own work.
Plagiarism is forbidden by the Academic Honesty Policy of UGA and will be dealt with ac-
cordingly.  (Additionally, as solving problems will be your principal method of preparing for
exams, you do yourself no favor by coping someone else's work.)  Some problem sets will
include a computer problem, which you must complete using Mathematica, Matlab, or simi-
lar software.  Mathematica is on certain machines in the physics computer lab.

Exams
There will be two in-class midterm exams and a final exam.  If you miss an exam due to a
serious, documented illness, you may take a make-up exam for full credit.  If you miss an
exam for an unexcused reason (overslept, forgot, etc.) you may take a make-up exam for
75% credit.

Each midterm exam constitutes 23.3% of your course grade.  The final exam will have op-
tions -- a non-comprehensive and comprehensive option.  The non-comprehensive final will
cover only the material in the last part of the semester, and will constitute 23.3% of your
grade.  All midterm exams count towards your course grade if you choose this option.

The other option for the final exam is the comprehensive final, for which you are eligible if
you have a passing grade in the course going into the final.  The comprehensive final will
count for 46.6% of your grade, and your worst midterm exam will be dropped. This allows you to recover from one poor midterm score, and still earn a good grade in the class.

**Rules concerning withdrawals and incompletes**
We will follow the rules of the UGA Bulletin concerning withdrawals and incompletes.

**4102 Grade Calculation**
Your course average is the weighted average of your homework and exam scores:

Non-comprehensive final exam option:
\[
<4102 \text{ Average}> = 0.300 \times <\text{Homework}> + 0.233 \times <\text{Midterm}_1> + 0.233 \times <\text{Midterm}_2> + 0.233 \times <\text{Final}\_\text{Exam}>
\]

Comprehensive final exam option:
\[
<4102 \text{ Average}> = 0.300 \times <\text{Homework}> + 0.233 \times <\text{Better of Midterm}_1 \text{ or Midterm}_2> + 0.466 \times <\text{Final}\_\text{Exam}>
\]

**6102/4102H Grade**
Students enrolled in 6102 or 4102H will be assigned “honors problems.” These assignments are due as indicated on the class schedule. They will be graded from A-F, and will constitute 10% of your final course grade according to the following formula:

\[
<4102/6102 \text{ Average}> = 0.900 \times <4101 \text{ Average}> + 0.100 \times <\text{Honors Problems Average}>
\]

**Letter Grades**
The letter assignment points thresholds are shown below. Standard rounding practices will be used. Factors such as improvement, effort, and class participation may be used to make very slight adjustment in borderline grades.

94.00 = A  
90.00 = A-  
87.00 = B+  
84.00 = B  
80.00 = B-

74.00 = C  
70.00 = C-  
64.00 = D

**Academic Honesty**
All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work. More detailed information about academic honesty can be found at the website given above. As a UGA student, you are responsible for knowing and understanding this policy. If you have any questions about the propriety of actions relating to this course, you are obligated to ask me for clarification. See also the UGA website:

http://www.uga.edu/honesty/

***This syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.***
## Class Schedule (**See eCommons for most current revision**)  

<table>
<thead>
<tr>
<th>Week</th>
<th>Tuesday</th>
<th>Thursday</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Date</td>
<td>Chapter Assignments Due</td>
</tr>
<tr>
<td>1</td>
<td>5-Jan</td>
<td>7-Jan 10</td>
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<tr>
<td>2</td>
<td>12-Jan</td>
<td>10 10</td>
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<tr>
<td>3</td>
<td>19-Jan</td>
<td>11 HW 10 Due</td>
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<tr>
<td>4</td>
<td>26-Jan</td>
<td>11 HW 10 Due</td>
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<tr>
<td>5</td>
<td>2-Feb</td>
<td>12 HW 11 Due</td>
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<td>6</td>
<td>9-Feb</td>
<td>13 HW 12 Due</td>
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<td>7</td>
<td>16-Feb</td>
<td><strong>Exam 10-12</strong></td>
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<td>8</td>
<td>23-Feb</td>
<td>13 13</td>
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<tr>
<td>9</td>
<td>2-Mar</td>
<td>14 HW 13 Due</td>
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<tr>
<td>10</td>
<td>9-Mar</td>
<td><strong>No class</strong></td>
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<td>11</td>
<td>16-Mar</td>
<td>15 HW 14 Due</td>
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<tr>
<td>12</td>
<td>23-Mar</td>
<td><strong>Exam 13-14</strong></td>
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<td>13</td>
<td>30-Mar</td>
<td>15 15</td>
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<td>14</td>
<td>6-Apr</td>
<td>15 15</td>
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<tr>
<td>15</td>
<td>13-Apr</td>
<td>16 HW 15 Due</td>
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<tr>
<td>16</td>
<td>20-Apr</td>
<td>16 HW 15 Due</td>
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<td>17</td>
<td>27-Apr</td>
<td><strong>Extra/Make-up</strong> HW 16 Due</td>
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<td>TBA</td>
<td><strong>Final Exam</strong></td>
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