Course Description: Physics 3101 (Mechanics I) covers the following topics: Newton’s laws of motion, Euler-Lagrange equations, variational principles and equations of motion, Hamilton’s principle, conserved quantities, rigid bodies and tops, introduction to nonlinear mechanics and chaos.

Instructor: Michael Rozman
email: rozman@phys.uconn.edu
phone: 860 486 5827
office: Room P327 in Physics Building

Office Hours: Monday and Wednesday from 1:00 PM to 3:00 PM in P322 Physics Building and/or by appointment.

Course Texts:

- **Required:**

- **Optional:**

- **Additional literature:**

Lectures: Monday, Wednesday, and Friday 11:00 AM — 11:50 PM in room M407, Math Building.

Computer Lab: Physics Computer Lab P122, time to be arranged.

Course Webpage: [http://www.phys.uconn.edu/phys3101/](http://www.phys.uconn.edu/phys3101/)
Communications: Email to rozman@phys.uconn.edu is the preferred method to contact the instructor. Please include the string “[phys3101]” (without quotes) in the subject of your email, e.g. “[phys3101] midterm II retake”. Phone calls are returned at the discretion of the instructor.

Homework: Weekly homework assignments

Honors conversion: Students interested in honors conversion should contact the instructor during the first week of classes.

Exams: There will be two lecture-hour midterm exams and an open-book cumulative final exam.

Grading scheme: The course grade will be calculated using the following scheme.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Homework</td>
<td>30%</td>
</tr>
<tr>
<td>Midterms</td>
<td>40%</td>
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<tr>
<td>Final exam</td>
<td>30%</td>
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