Course Description
The first semester of the three-semester calculus-based introductory physics sequence, designed primarily for science and engineering majors. Introduction to the principles of classical mechanics: concepts of motion, Newton's laws, the law of gravity, conservation of energy, momentum, and angular momentum, rotation, and oscillatory motion.

Prerequisite: Co-requisite: MATH 114

Course Textbook
• *University Physics*, 13th edition, by Young and Freedman (Pearson/Addison Wesley)

Required Online Account for Homework Assignments
• At Mastering Physics, [http://www.masteringphysics.com/](http://www.masteringphysics.com/)
  • First time registration:
    □ Watch the video at [http://www.masteringsupport.com/videos/registration_tips/registration_tips.html](http://www.masteringsupport.com/videos/registration_tips/registration_tips.html)
    □ Register at [http://www.masteringphysics.com/](http://www.masteringphysics.com/) using your access code (purchased with your textbook or online). Make sure your access code matches the course textbook exactly.
    □ Enter the course ID: MPNIKOLIC61842, and the exact textbook information
    □ Be sure to enter your last then first name correctly, to ensure receiving credit
    □ Enter your GMU student ID number (the G-number)

Lecture Instructor
Predrag Nikolic
Office: Planetary Hall, room #209
Phone: 703-993-5068
Email: pnikolic@gmu.edu

Recitations
Problem-solving demonstrations, including discussions of concepts, homework assignments and exams. Attendance is recorded and graded by the recitation instructors.

Office Hours and Tutoring
• P. Nikolic: Mondays after class, 10:30am-11:30pm (Planetary Hall #209)
• Ask your recitation instructor for his/her office hours
• Tutoring: see the location and schedule in the Physics Office, Planetary Hall #203

Grading
Numerical scores are awarded for homework, exams, and recitation attendance. The scores have the following weight in the final score:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>homework</td>
<td>20%</td>
</tr>
<tr>
<td>recitation attendance</td>
<td>20%</td>
</tr>
<tr>
<td>two midterm exams</td>
<td>20% each</td>
</tr>
<tr>
<td>final exam</td>
<td>20%</td>
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</tbody>
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Students are ranked by their final score and assigned a letter grade. The boundaries between letter grades are determined based on the overall class performance.
Homework
• Assigned once a week using the online Mastering Physics system.
• Every assignment must be completed online by 11:59 pm on Friday following the assignment week. Solutions and scores will be available immediately.
• Start well before the deadline, the number and difficulty of problems may vary.
• The online system is automated. Homework deadlines cannot be extended.

Exams
• There are two midterm exams in regular class time, each covering a part of the course material.
• The final exam takes 2 hours 45 minutes and covers the entire course material.
• Bring a scientific calculator to exams.
• The use of any literature and programmable or internet-capable computing devices is not permitted.
• You may bring one 8.5x11" sheet with any notes or formulas on it.
• Problems may or may not be very similar to those given in homework assignments.
• If you have to miss an exam and have a valid documented excuse, you have the right to request a makeup exam. Valid excuses include academic or athletic obligations beyond your control at GMU, as well as medical reasons (e.g. serious illness). The excuse must be documented in written form and signed by a person with appropriate authority (e.g. athletic coordinator or doctor).
• Requests for a makeup exam should be made as soon as possible, and at least a week prior to the regular scheduled exam time if the dates of conflicting obligations are known. Every effort will be made to arrange a single makeup exam for all students who request it, on the same day as the regular exam if possible or shortly after.
• Alternatively, you may skip one exam due to a valid documented reason and request that the other two exams be counted as 60% of your final score. This is the default option, especially if the documented excuse is presented too late.
• If you must miss two or more exams, do not take the course.

Important dates
Sep 1: Labor Day, university is closed
Sep 2: Last day to drop classes with no tuition penalty, last day to add classes
Sep 16: Last day to drop classes with 33% tuition penalty
Sep 26: Last day to drop classes with 67% tuition penalty, final drop deadline
Sep 22 – Oct 17: Midterm progress reporting period
Sep 29 – Oct 24: Selective withdrawal period
Oct 13: Columbus Day recess (the class is moved to Tuesday Oct 14, the same time)
Nov 26 – 30: Thanksgiving recess
Dec 6: Last day of classes
Dec 8 – 9: Reading days
Dec 10 – 17: Exam period

Class, recitation, homework and exam schedule
Please, see and check regularly the course web-site: http://physics.gmu.edu/~pnikolic/PHYS160/

Honors program
Students participating in the honors program will meet regularly with the instructor to complete extra coursework. Each honors student will study a selected advanced topic, present it before the others and lead a discussion. Meeting place and times will be either posted on the course web-site, and/or announced by email. If a student is unable to attend meetings due to an unavoidable schedule conflict, he/she can fulfill the credit requirement by writing an essay instead of presenting in class (this has to be arranged with the instructor in a timely manner).