You must be enrolled in all four components of the course: LEC, QZ, REC, and LAB. To change from one section to another Do NOT use the Drop/Add process in iSIS – this will eject you from the course and move you to the bottom of the wait-list. Instead, use the Swap or Edit feature.

**Course instructors:**

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Name</th>
<th>Office</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture/Recitation</td>
<td>Yurii Maravin</td>
<td>CW 11</td>
<td>532-1638</td>
<td><a href="mailto:maravin@phys.ksu.edu">maravin@phys.ksu.edu</a></td>
</tr>
<tr>
<td>Recitation, supplemental lectures</td>
<td>Sara Crandall</td>
<td>CW 116</td>
<td>532-5636</td>
<td><a href="mailto:sara1990@k-state.edu">sara1990@k-state.edu</a></td>
</tr>
<tr>
<td>Recitation</td>
<td>Artem Rudenko</td>
<td>CW 331</td>
<td>532-4470</td>
<td><a href="mailto:rudenko@phys.ksu.edu">rudenko@phys.ksu.edu</a></td>
</tr>
<tr>
<td>Lab</td>
<td>Tracy Tuttle</td>
<td>CW 402</td>
<td>532-1605</td>
<td><a href="mailto:trutt@phys.ksu.edu">trutt@phys.ksu.edu</a></td>
</tr>
</tbody>
</table>

**Course Description:** This course is an algebra/trigonometry-based course designed to deepen understanding of basic physical principles and teach you how to systematically and deliberately analyze. The course focuses on the physics of motion, system of particles, conservation laws, fluids, and thermodynamics.

**Required textbook and materials:**

**Textbook:** *Physics: Principles with Applications* (7th Edition) by Douglas C. Giancoli, available as separate vols. 1 and 2 in paperback, or in combined vols. 1, 2 in hardcover. We will cover the material in vol. 1 in PHYS113, and the material in vol. 2 in PHYS114. If you plan to take both courses, the hardcover version is considered a better deal. The text is also available in electronic form. (I do not care where you get the text, or in what form, as long as you read it.)

**Mastering Physics™:** This is a web-based tutoring and homework assignment system. It can be purchased separately or bundled with the textbook: there are many options, and the bookstore and the publisher do not seem to agree on which is the best deal. Registration instructions for Mastering Physics™ will be posted in K-State Online and given in the first day of class.

**i>clicker®:** This is a remote-control-looking gizmo used in many classes at K-State. If you already have one, you can use it. If not, you can buy one from the bookstore or on-line.

**Lab manual:** will be provided. The lab makes extensive use of computers – the lab manual will be in electronic form accessible on KSOL and in the lab.

**Course Web Site:** Important course resources such as exam grades, announcements, practice exams, lecture notes and so-on will be posted on the course web site, accessed through K-State Online. You can also find information and links to help for physics courses at [http://www.phys.ksu.edu/teaching.html](http://www.phys.ksu.edu/teaching.html).

**Supplemental Lecturing:** Sara Crandall is leading PHYS113 supplemental lectures taking place on Fridays from 2 pm to 4 pm in Cardwell Hall 41. Supplemental instruction is a tool available to all GP1 students seeking help outside of the classroom. It is intended not only for students that are struggling, but also for anyone who wishes to maintain or improve their grade. There will also be review sessions before each exams (dates and times will be announced).
**Individual Help:** Any student wanting individual help is urged to visit the Physics Help Room in Cardwell (CW) 41 whenever it is open, or see their recitation or lecture instructor during office hours, or at other times by appointment. The schedule of the Help Room will be posted on the course web site and on the Physics Department teaching page about a week after courses begin. In addition, some physics graduate students work as paid tutors. A list of contacts will be posted when available.

**Authorized vs Unauthorized Aid in Academic Work for this class:** In this course, you are permitted to work with other students on homework problems, but you may not directly copy answers from any source. You must work the problems for yourself. Exams and quizzes must be completed individually using only the materials allowed by the exam/quiz instructions. Policies for laboratory work and write-ups are given in the lab manual. If you have any questions about what constitutes authorized and unauthorized aid, contact the instructor immediately.

**Recitations and Homework:** Recitation is an important and valuable component of the General Physics curriculum, attendance and participation is expected. Solving problems systematically on a regular basis is an important part of success in physics. Qualitative understanding of concepts is also important.

Homework counts as 30% of your final grade. There will be one assignment per week. Most of the homework will consist of short-answer questions and tutorials in the Mastering Physics™ web-based instruction system. One problem each week must be worked out on paper. The “paper homework” will be graded on the work shown.

Assigned homework should be worked out before the Wednesday recitation class each week. Recitation class will be used for discussing concepts and solutions of problems. Your solution to the “paper homework” must be turned in to your recitation instructor at the end of recitation. Final on-line homework answers must be submitted in Mastering Physics™ before 10:00 PM Wednesday. **No credit is given for late homework.**

**Exams:** There will be five in-class exams and a final administered throughout the term. There are five one-hour exams during the semester. Only the best four of your five scores will count. Makeup exams will be given only in extraordinary circumstances. Exams are given at 5:30 PM on the Thursdays shown in the schedule, in CW101, CW102, and CW103. Assignment of exam rooms will be announced in lecture and posted on the course web site. The final exam is comprehensive, mandatory, and has almost the same weight as two one-hour exams.

Exams contain problems that are similar (but not identical) to homework problems, and also conceptual questions in multiple-choice format. You will record multiple-choice exam responses on Scantron cards for automatic grading. Your exam grade will usually be available in the Gradebook on the course web site a few days after each exam.

The exams are closed-book and closed-note. A sheet of “useful equations” will be provided with your exam as a memory aid. But please note that past student experience has shown that having equations available does not guarantee success – understanding the physics is the key. **Make-up exams are given only in extraordinary circumstances and only with prior arrangement.**

**Practice Exams:** A file of last year's exams (without solutions) will be available on the course web site. They are a useful study resource. Each practice exam also includes the equations sheet, so you can see what equations will be provided.

**Laboratory:** The lab is an integral, hands-on, and important part of your physics education and accounts for 30% of your overall grade. Take the lab seriously and do well – the lab can greatly affect your overall grade. **No late labs are accepted and you must not be late to lab – attendance will be
taken and if you are tardy, you are absent. Lab instructions and information will be posted on KSOL and available in the laboratory. Missed labs cannot be made up for any reason. The lowest lab score will be dropped to calculate your final lab grade.

Credit for Previous Lab Work: Students re-taking the course who have previously passed the lab should contact Tracy Tuttle in CW402 trutt@phys.ksu.edu prior to the first lab meeting in order to get permission to be enrolled into the 01B (re-take) lab section.

Grading: Grades are determined on a 1000 point scale as shown below. You cannot get a good grade in the course unless you do all the homework, take all the exams, and do well in the laboratory.

Distribution of points:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best 4 of 5 exams</td>
<td>200</td>
</tr>
<tr>
<td>Mastering PhysicsTM (15 x 15 pts)</td>
<td>225</td>
</tr>
<tr>
<td>Written Homework (15 x 5 pts)</td>
<td>75</td>
</tr>
<tr>
<td>Final exam</td>
<td>200</td>
</tr>
<tr>
<td>Laboratory† (12 x 15 pts)</td>
<td>300</td>
</tr>
<tr>
<td>Total:</td>
<td>1000</td>
</tr>
</tbody>
</table>

Determination of final grade:

- 900 points or above: A
- 800 – 899 points: B
- 700 – 799 points: C
- 600 – 699 points: D
- Under 600 points: F†

† A passing grade in laboratory is required to pass the course.

GRADES MAY BE CONTESTED UP TO ONE (1) WEEK AFTER BEING POSTED ON KSOL - AFTER THAT THEY BECOME A PERMANENT ACADEMIC RECORD.

Conditions Requiring Special Accommodations: If you have any condition such as a physical or learning disability which will require academic accommodations, please notify the instructor and contact the Disability Student Services office (Holton 202) during the first two weeks of the course.

All Course Syllabi Must Include the Following Statements

[but please read them anyway]

Statement Regarding Academic Honesty:

Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reached via the following URL: www.ksu.edu/honor. A component vital to the Honor System is the inclusion of
the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation. For more information refer to the “Academic Dishonesty” policy in the K-State Undergraduate Catalog and the Undergraduate Honor System Policy on the Provost's web page at http://www.ksu.edu/honor/.

**Statements for Academic Accommodations for Students with Disabilities**

Any student with a disability who needs a classroom accommodation, access to technology or other academic assistance in this course should contact Disability Support Services (dss@k-state.edu) and/or the instructor. DSS serves students with a wide range of disabilities including, but not limited to, physical disabilities, sensory impairments, learning disabilities, attention deficit disorder, depression, and anxiety.

**Statement Defining Expectations for Classroom Conduct**

All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article VI, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

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**Acknowledgement**

Yurii Maravin thanks Glenn Horton-Smith, Larry Weaver, and Tracy Tuttle for help in preparation for the PHYS113 course material including this syllabus.