San José State University
College of Science/Dept Physics & Astronomy
PHYS 50W - General Physics/Mechanics Workshop - Spring 2016

Instructor: 

Office Location: 

Telephone: 

Email: 

Office Hours: 

Class Days/Time: 

Classroom: SCI-326 

Corequisite: PHYS 50 General Physics/Mechanics 

Catalog Description
A discussion course for students concurrently registered in Physics 50 General Physics/Mechanics covering problem solving methods as related to topics covered in Physics 50. Co-requisites: PHYS 050 

Course Description
Students will work in small groups with the aid of facilitators on problems related to the content of PHYS 50. There are no required texts for the workshop. Problem sets will be handed out in the workshop. The topics covered in workshop will keep pace with what is covered in class for most of the semester; however the lecture topics may get slightly ahead of the workshop toward the end of the semester. The workshop is intended to reinforce the most fundamental concepts of Physics 50, which include vectors, linear and rotational kinematics, forces, and the conservation of energy, momentum and angular momentum. Workshops will cover one chapter per week, with the exception of exam weeks, when there will be review problems. 

Student Facilitators
Your facilitator should give you information about how to contact him/her. If you have any issues, questions, or suggestions about any aspect of this workshop, please contact Prof. Monika Kress (408-924-5255, monika.kress@sjsu.edu office SCI-264).
Why PHYS 50W?

Students in PHYS 50 need to learn to solve problems. Research shows that most students learn problem solving much better when they work actively in groups, as opposed to passively watching problems solved in a lecture or working problems alone using the text. PHYS 50W workshops are modeled on workshops that have been used successfully in the Calculus 1 courses at SJSU, as well as on workshops in physics courses at other universities. Students taking those workshops experienced a significant rise in course grades, and a significant decrease in the probability of failing, compared to those who did not take the workshops.

Classroom Protocol

Workshops last one hour and fifty minutes. Students will work in groups of three or four, solving problems that will be handed out at the beginning of class. These problems will generally not be those assigned as homework in the lecture. Problems will be worked on blackboards or whiteboards on the walls. Students will take turns writing the problems and leading the discussion. It is expected that each student in a group will participate actively in discussing and solving the problems. Bring your text and a scientific calculator with you. A student facilitator will be present, whose role is to take attendance, and to provide questions and hints when a group gets stuck. Facilitators are not there to solve the problems for you, but to help you solve the problems yourselves. Problems will not be graded; the student facilitator will note that groups are making satisfactory progress solving the assigned problems. All communication devices, including cell phones and any device connected to the web, will remain off.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester’s Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic calendar web page located at http://www.sjsu.edu/academic_programs/calendars/academic_calendar/ . The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/ Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/ .

Assignments and Grading Policy

There will be no outside assignments. Students who are absent for more than three classes (including leaving early or arriving late), or whose participation in class is not as active or as adequate as expected, will receive a grade of No Credit. The workshop does not affect your grade for the course, except to the extent that students who meaningfully participate and work on the problems tend to get a better grade than those who do not.
University Policies

Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The University’s Academic Integrity policy, located at http://www.sjsu.edu/senate/S07-2.htm, requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sa.sjsu.edu/judicial_affairs/index.html.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person’s ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU’s Academic Policy S07-2 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the Accessible Education Center at http://aec.sjsu.edu/ to establish a record of their disability.

Schedule for this semester

Workshops will usually begin on the first Monday of the semester. If your workshop meets early in the week and your lecture has not covered the material yet, you may wish to work on the problem set from the previous week.

Week 1: Chapter 1 (adding vectors and math review)
Week 2: Chapter 2
Week 3: Chapter 3
Week 4: Chapter 4
Week 5: Exam week (Review Chapter 1-4)
Week 6: Chapter 5
Week 7: Chapter 6
Week 8: Chapter 7
Week 9: Chapter 8
Week 10: Exam week (Review chapters 1-8)
Week 11: Chapter 9
Week 12: Chapter 10
Week 13: Chapter 11
Week 14: Chapter 14
Week 15: Review for final