

Course Description

- 22) Compute the radiative properties emissivity, absorptivity, reflectivity, and transmissivity.
- 23) Apply Kirch
- 24) Account for environmental radiation.
- 25) Compute view factors.
- 26) Calculate radiation exchange between blackbodies.
- 27) Analyze radiation exchange between two diffuse, gray surfaces in an enclosure.

Required Texts/Readings

Textbook

Heat and Mass Transfer: Fundamentals and Applications, by Cengel and Ghajar, 5th ed., McGraw-Hill, 2010. 2nd and 3rd editions by Cengel are also OK. The bookstore has a use removed to lower the price.

Classroom Protocol

Please do not use cell phones in class. Exams and most quizzes will be given at the beginning of class, so plan to be on time.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current [Catalog Policies](http://info.sjsu.edu/static/catalog/policies.html) section at <http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be found on the [current academic calendar](http://www.sjsu.edu/academic_programs/calendars/academic_calendar/) web page located at http://www.sjsu.edu/academic_programs/calendars/academic_calendar/. The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/policy45) is available at <http://www.sjsu.edu/aars/policies/latedrops/policy45>

An exceptionally good final exam (10% higher than your average score going into the final) may result in a grade slightly higher than what is shown here. One extra credit project will be available during the semester, but no extra credit will be available at the end of the semester.

Expected Time Commitment

Many students who do poorly in ME 114 appear to do so because they do not devote enough time to learning and practicing the subject material. You should plan to spend 2-3 hours outside of class for every hour in class, for a total of **6-9 hours outside of class**. This time should be spent reviewing notes, reading the book, doing homework problems, and studying for exams. You may need to do more homework problems than those assigned in class to get a good understanding of some of the material. The university requires the following related language to be on all course syllabi:

s based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course

Exams and Quizzes

Two exams and four quizzes will be given in addition to the final exam. They must be taken on the scheduled dates unless a) you can show a note from the medical center or a hospital documenting illness or other emergency or b) you make other arrangements with the instructor before the exam date. The exams are closed book (although an equation sheet will be allowed as discussed in class). The quizzes and final exam are open book with no notes allowed.

University Policies

Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The [Univ Academic Integrity policy](http://www.sjsu.edu/senate/S07-2.htm), 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](http://www.sa.sjsu.edu/judicial_affairs/index.html) 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

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

Peer Mentor Center

The Peer Mentor Center is located on the 1

Topics