



## Course Goals

At the end of the semester student should demonstrate proficiency in these fields:

1. **PASSIVE HEATING AND COOLING DESIGN FOR HOUSES:** The basics of integral solar home design for heating and cooling, sunspace additions to homes, and direct gain for new construction and remodel.
2. **HOME ENERGY EFFICIENCY:** How to make a home more energy efficient than conventional homes improving heating/cooling systems, the building envelope, lighting, and appliances and working on occupant behaviors. How to decrease our impact on the environment through the way we live in our homes. Each student will perform a level 1 energy audit on his/her family house and write a final 10 pages report with personalized recommendations.
3. **GREEN LIVING:** Using 'green' and recycled building materials for construction and interior living spaces.
4. **HEALTHY HOMES:** Often, indoor air is more polluted than outside air. We will explore ways to prevent this.

**Course Learning Outcomes (CLO)** See "Course Goals" above.

## Required Texts/Readings

: . By Daniel D. Chiras, published by Chelsea Green Publishing Company, 2002. Available on Amazon.com (instant download available on Kindle/Kindle apps).

10th edition by Jennifer Thorne Amann, Alex Wilson, and Katie Ackerly, published by New Society Publishers, 2012. Available on Amazon.com (instant download available on Kindle/Kindle apps, hardcopy book strongly recommended)

## Other Readings (no need to purchase)

Articles and handouts are posted to canvas: <https://sjsu.instructure.com/>

5th edition by John Krigger and Chris Dorsi.

Published by Saturn Resource Management, Inc., 2004.

## **Grading Information – Final Examination**

20% Participation: It is expected that you will engage in class discussions as the class is formatted as a seminar. Share your thoughts about the readings when prompted in class, ask questions about lectures and readings, answer discussion prompts.

Penalty for late or missed work: -10% of the assignment's grade after 1<sup>st</sup> week of delay. -20% of the assignment's grade after 2<sup>nd</sup> week of delay. Not accepted after more than 14 days of delay (grade will be null)

### **Classroom Protocol**

You are expected to come to every class on time. Class time starts with attendance check (not reflected in your final grade). However, classroom participation and results on the quizzes will be reflected in your final grade. No cell phone, emailing, or text messaging during class. If you need to make a phone call or send an email, or work on anything else that class material please excuse yourself from class or your instructor will ask you to leave the classroom.

### **University Policies**

#### **Academic integrity**

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The [University Academic Integrity Policy F15-7](#) 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. Visit the [Student Conduct and Ethical Development](#) website for more information.

See here for other campus wide policies <http://www.sjsu.edu/gup/syllabusinfo/>

**Solar Home Design ENVS/DSIT 132, Spring 2017**  
**#30244 #30245**  
**Course Schedule**

This schedule is subject to change with fair notice. If necessary, the electronic schedule available on Canvas will be updated along the semester on a week to week basis.

**1/26 Introduction – #1 Energy, the big picture, units**

**Readings:** Handouts (article on Negawatts)

**1/31-2/2 - #2 Passive Solar Home**

**Readings:** Read chapters 1-

