

**Sustainable Energy Strategies, Environmental Studies Department, San José State University  
ENVS 133, Section 01, Spring 2023**

**Instructor:** Dr. Dustin Mulvaney (pronouns: he/him), Professor, Environmental Studies  
**Office Location:** 115A Washington Square Hall (WSQ)  
**Email:** [dustin.mulvaney@sjsu.edu](mailto:dustin.mulvaney@sjsu.edu)  
**Office hours:** Tuesday 1 2:30 PM or by appointment  
**Class Days/Time:** Tuesday 3 5:45 AM  
**Classroom:** WSQ 111  
**Prerequisites:** ENVS 119 (preferred, not required)

**Course Description:** This course will provide students with a comprehensive overview of energy efficiency, energy conservation, and energy generation opportunities for transitioning to a sustainable energy economy. Students will learn about metrics and assessment tools to evaluate alternative modes of transportation, transportation fuels, electricity infrastructure, designs in the build environment and other green infrastructures and their impacts on greenhouse gas emissions, land use, ecological systems, air pollutants, and environmental justice. Students will assess the biophysical constraints and opportunities for sustainable energy deployment. The class is designed to be interdisciplinary, putting energy studies research into conversations in environmental sociology, political ecology, and science & technology studies help us understand, explain, and advocate for energy transitions. Topics include well-to-wheels calculators and low carbon fuel standard; techno-ecological synergies with solar, wind power siting and public participation,



Jenkins. [Keeping the balance: How flexible nuclear operation can help add more wind and solar to the grid](#)

Roberts, D. 2016. The key to tackling climate change: electrify everything. Vox. <https://www.vox.com/2016/9/19/12938086/electrify-everything>

Pepin, I. 2018. Keeping the balance: How flexible nuclear operation can help add more wind and solar to the grid. <https://news.mit.edu/2018/flexible-nuclear-operation-can-help-add-more-wind-and-solar-to-the-grid-0425>

Listen: Energy transition show podcast [Episode #132] Jenny Chase, the Future of Solar. <https://xenetwork.org/ets/episodes/episode-132-the-future-of-solar/>

Listen: Energy transition show podcast [Episode #30] The future of w1 0 0 1 3

Listen: Energy Transition Show podcast: [Episode #60] Demand Flexibility. <https://xenetwork.org/ets/episodes/episode-60-demand-flexibility/>

Jacobson, M. Z., Delucchi, M. A., Ingraffea, A. R., Howarth, R. W., Bazouin, G., Bridgeland, B., et al. (2014). A roadmap for repowering California for all purposes with wind, water, and sunlight. *Energy*,

**Low Carbon  
Industries and  
the Built  
Environment**

[https://libguides.sjsu.edu/environmental\\_studies](https://libguides.sjsu.edu/environmental_studies)

**Classroom Protocol:** You are expected to come to every class on time. Coming into class late is a disturbance to others. Classroom participation is 20% of your grade, and classroom disturbance will be reflected in participation scores. **No cell phone, emailing, or text messaging during class.** If you need to make a phone call or send an email, please excuse yourself from class.

*University Policies*

**General Expectations, Rights and Responsibilities of the Student**

As members of the academic community, students accept both the rights and responsibilities incumbent upon all



of topics. For more information on services, hours, locations, or a list of current workshops, please visit [Peer Connections website](http://peerconnections.sjsu.edu) at <http://peerconnections.sjsu.edu> for more information.

The SJSU **Writing Center** is located in Clark Hall, Suite 126. All Writing Specialists have gone through a rigorous hiring process, and they are well trained to assist all students at all levels within all disciplines to become better writers. In addition to one-on-one tutoring services, the Writing Center also offers workshops every semester on a variety of writing topics. To make an appointment or to refer to the numerous online resources offered through the Writing Center, visit the [Writing Center website](http://www.sjsu.edu/writingcenter) at <http://www.sjsu.edu/writingcenter>. For additional resources and updated information, follow the Writing Center on Twitter and become a fan of the SJSU Writing Center on Facebook.

**SJSU Counseling and Psychological Services** The SJSU Counseling and Psychological Services is located on the corner of 7th Street and San Carlos in the new Student Wellness Center, Room 300B. Professional psychologists, social workers, and counselors are available to provide confidential consultations on issues of student mental health, campus climate or psychological and academic issues on an individual, couple, or group basis. To schedule an appointment or learn more information, visit [Counseling and Psychological Services website](http://www.sjsu.edu/counseling) at <http://www.sjsu.edu/counseling>.