San José State University
College of Social Sciences, Department of Environmental Studies
ENVS/URBP 190 Advanced Environmental Impact Assessment Spring, 2025

Course and Contact Information

Instructor:	Ada E. Márquez
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Office Hours:	Wednesdays, 12:00 noon to 1:00 pm and by appointment
Class Days/Time:	Wednesdays, 4:30 pm to 7:15 pm
Classroom:	Clark Building, Room 243
Lab/Activity hours/week:	Off Campus In-Person and On-Line
Prerequisite(s):	ENVS 01, ENVS 124, ENVS 185, or instructor consent

Course Catalog Description

Advanced work in the field of environmental impact assessment. Analysis of EIA documents for regulatory adequacy, consistency with local planning documents and technical accuracy. **Grading: Letter Graded**

United Nations Sustainable Development Goal - SDG 11: Make cities inclusive, safe, resilient and sustainable [Cities - United Nations Sustainable Development Action 2015](#)
11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage
11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities
11.A Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
11.B By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

This course examines the nexus between environmental impacts, socio-economic status (SES), human health, and environmental justice. The advanced course in environmental impact assessment is designed to allow a small group of highly motivated students to probe more deeply into the impact assessment topics covered in ENVS 185 EIA: biological resources, air quality, hydrology, transportation, archaeology, etc. Building upon this knowledge of physical environmental impacts, we will continue with an interdisciplinary approach. Students will strengthen their analytical skills to prepare environmental impact assessments (EIA) per the CA

Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Moreover, students will use various tools such as CalEnviroScreen, CalEEMod, and others.

The ENVS 190 course uses a very individualized, project-oriented approach and teamwork. Students are expected to increase their expertise in impact assessment through research, analysis, writing, and presentation of individual topics to support the current Introduction to Environmental Impact Assessment class. Students will expand their analytical skills by applying various state and federal laws, the most current databases for environmental and health protection, and scientific research, and create effective mitigation measures to protect natural systems and human health from climate change impacts. The course will include field visits to the class project site, expert guest lectures, discussion of group readings selected by students, and other professional activities.

Course Format: In-Person Lecture Course, Off Campus Technology Intensive, and Canvas Online

Students can borrow laptops, iPads, and other technology at no charge from SJSU [Student Computing Services | Dr. Martin Luther King Jr. Library (sjsu.edu)](). SJSU has numerous locations on campus for student study and workspaces with Wi-Fi and outlets. [Student Study and Workspace Resources | Learn Anywhere (sjsu.edu)]().

Students need the following:
- Internet connectivity or Wi-Fi, and technology such as a computer/laptop to access Zoom and Canvas
- Ensure your device meets Zoom system requirements [System requirements for Windows, macOS, and Linux – Zoom Help Center]()
- Access to Canvas Learning Management system, which is located at [https://sjsu.instructure.com/]()
    - [Canvas Student Resources | eCampus (sjsu.edu)]()
- Free access to Microsoft Office 365 software | Information Technology (sjsu.edu): You can access the Office 365 Portal with your SJSU email address and SJSUOne password.
- Please have Adobe software installed: [Adobe Creative Cloud for Students | eCampus (sjsu.edu)]()

Other student technology resources:
- [Associated Students Print & Technology Center]() at on the Student Union (East Wing 2nd floor Suite 2600)
- [The Spartan Floor]() at the MLK Library at [library.sjsu.edu/services/services]() (Fourth floor)
- [Student Computing Services]() at [library.sjsu.edu/student-computing-services/student-computing-services-center]()

Department Learning Outcomes and Goals

This course will help you achieve these Departmental Learning Objectives, which are competencies we expect all our graduates to have upon completion:

Department LO 3 <u>Content Environmental Literacy</u>: Students will develop proficiency in the interdisciplinary sustainability principles that are the foundation of environmental studies; they will know the key environmental challenges facing the planet, know relevant interdisciplinary information about these challenges and be able to develop/identify feasible solutions (Broad Integrative Knowledge & Applied Knowledge)

Department LO 4 <u>Professional Skills:</u> 4A) Students can productively conduct group/teamwork to deliver professional quality presentations and reports (Intellectual Skills & Applied Knowledge); 4B) Students demonstrate professional work skills (Intellectual Skills); 4C) Students engage in community service and democratic participation (Social and Global Responsibilities)

Course Content Learning Outcomes and Goals

Learning Objective 3 (LO 3). Students will expand their training in environmental impact assessment to prepare for the California Environmental Quality Act (CEQA), federal National Environmental Policy Act (NEPA),

and/or international work.

Learning Objective 4 (LO 4 A, B): Students will complete a professional environmental impact assessment using the California Environmental Quality Act (CEQA).

Learning Objective (LO 4C) - Build local environmental sustainability and democratic participation through public participation and engagement.

The following Assessment Measures will be used to evaluate students' progress toward the Course Content Learning Objectives:

1. Students will be given a complex project to complete an environmental impact assessment using the most current scientific peer-reviewed literature, grey literature produced by practitioners in the field, applying EIA practices and government standards, and environmental/regulatory thresholds. (LO 3)
2. Students will demonstrate analytical skills, report writing, and presentation in word processing, spreadsheet, and presentation software, as well as an ability to locate and interpret data from various database sources to create maps and other important information. Students will prepare a project report and a presentation to comply with CEQA/NEPA for a San Jose, CA, community. (LO 4)
3. Students will undertake local project(s) that contribute to democratic institutions, promote sustainability, and allow them to apply knowledge gained in their academic program. (LO 3 and LO 4)

Upon successful completion of this course, students will submit the following deliverables:

1. **Policy Brief: Issue, Rule, Analysis, and Conclusion (IRAC) Method Deliverable (~15%):** You are employed at an environmental agency and are tasked with writing an internal memorandum. The agency's manager requests a summary of a critical environmental issue. Students will practice the IRAC method for organizing their legal analysis in a Policy Brief. This deliverable will be about two pages, with in-text citations and references. [First and Final Draft] **(LO 3, LO 4 A, B)**

2. **Field visits and Class Participation (~10%):** Students will have a variety of in-class activities. Participation points cannot be made up without an excused absence approved by the instructor or for medical reasons. Field trips will occur during class time to the extent possible. Occasionally, field visits might be on a different day, but they are not required. **(LO 3)**

3. **CEQA Comment Letter Deliverable (~20%):** Students will be assigned a Project near a vulnerable population to examine the scientific evidence, environmental and health consequences, and apply environmental laws to analyze the issues and adequacy of the CEQA/NEPA document prepared by a lead agency. **(LO 3 and LO 4 A, B)**

4. **Environmental Impact Assessment (EIA) Deliverable (~35%): Individual and Team Deliverable.** Throughout the semester, students will be responsible for analyzing a land use development project. Students will work in teams of two and have individualized parts of the "Project" to conduct the environmental impact assessment (EIA). At the end of the semester, each team will prepare a professional document and presentation for the community. **(LO 3A, LO 4 A, B, C)**

5. **(1 unit) Online Lab Activity section (~20%):** Students must complete the 1-unit Service Activity, approximately 2 hours weekly. Students will be trained to be teaching assistants for the ENVS 185 EIA course, and you can include this experience in your resume. In addition, the instructor provides instructions for the online labs via Canvas to increase your skills. Students will also learn various online tools that integrate GIS. **(LO 3 and LO 4B)**

Grading Information

The course grade will be determined based on 1000 possible points. Accumulated points that fall within the grade scale below determine your semester grade.

Grade	Points	Percentage
A plus	960 to 1000	96 to 100%
A	930 to 959	93 to 95%

Grade	Points	Percentage
A minus	*900 to 929*	*90 to 92%*
B plus	*860 to 899*	*86 to 89 %*
B	*830 to 859*	*83 to 85%*
B minus	*800 to 829*	*80 to 82%*
C plus	*760 to 799*	*76 to 79%*
C	*730 to 759*	*73 to 75%*
C minus	*700 to 729*	*70 to 72%*
D plus	*660 to 699*	*66 to 69%*
D	*630 to 659*	*63 to 65%*
D minus	*600 to 629*	*60 to 62%*

Required Textbooks

Required

California Environmental Quality Act (CEQA). (2025). *Statute and Guidelines. Association of Environmental Professionals.* (AEP) Provided FREE at https://califaep.org/statute_and_guidelines.php

Sanford, R.M., Donald G. Holtgrieve. (2023). *Environmental Impact Assessment in the United States*. New Your, NY. Routledge. Environmental Impact Assessment in the United States - 1st Edition - R (eBook $41.39)

Or Paperback $33.19   Environmental Impact Assessment in the United States: Sanford, Robert M., Holtgrieve, Donald G.: 9780367467326: Amazon.com: Books

Optional

Herson, A., & Lucks, A.L**.** (2017). *CA Environmental Law and Policy: A Practical Guide.* Point Arena, CA: Solano Press. {H &L}.

You can download the Kindle app for PC, iPad, etc., for free, and purchase the ebook for $65.00. https://solano.com/pages/e-books

Rivasplata, T., G. Brownlow. (2020). *Practical CEQA: A Stepwise Guide to California Environmental Quality Act Compliance.* Solano Press Books, Point Arena, CA. https://solano.com/collections/featured-titles/products/practical-ceqa-a-stepwise-guide-to-california-environmental-quality-act-compliance

This book is available on Kindle for $40.00.

On Canvas, other resources will be available to use for class deliverables.

Other Readings
Please see below for other required readings.

Citation Required
Formal papers are required to use the APA Guidelines. APA Legal References - Purdue OWL® - Purdue University

Course Requirements

Credit-hours statement: *University Policy S16-9,* "Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course-related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus."

Late Assignment Policy: Deliverables submitted the following day of the posted due date will receive a 10% grade reduction. Those turned in the day after that will lose another 10%. Deliverables later than that will not be accepted. .

Originality and honesty: It is appropriate to cite others' work extensively, with attribution. It is never appropriate to use other authors' language or ideas from the web or written documents as though they were your own. If you have any questions about proper citations, please talk to me or write me a note. Misuse of written material can result in course failure. If you need help or have any questions, contact the instructor. University Academic Integrity Policy F15-7 [pdf] Student Conduct and Ethical Development

Plagiarism, intentional or not, will not be tolerated in this course. This course is designed to provoke critical thought and writing, and plagiarism will not help you to become a better thinker or writer. For an extensive read of the University guidelines for dealing with plagiarism, see the University Academic Integrity Policy F15-7 at sjsu.edu/senate/docs/F15-7.pdf. *The first incidence of plagiarism will result in a zero (0) for the assignment and a report filed with the Office of Student Conduct and Ethical Development as required by SJSU. A second incidence of plagiarism may result in a failing grade for the course and a second report filed.* **Cite the source for any fact not understood to be common knowledge.**

Here is an idea of what plagiarism looks like – this does not replace the definition of plagiarism found at the above link to the Academic Integrity Policy:

You are plagiarizing or cheating if you:

- ✔ For any work completed in this course, use any type of Artificial Intelligence (AI) website or software.
- ✔ For written work, copy anything from a book, article, or website and add or paste it into your paper without using quotation marks and/or without providing the complete reference for the quotation, including page number.
- ✔ For written work, summarize/paraphrase in your own words ideas you got from a book, article, or the web without providing the complete reference for the source (including page number in the humanities).
- ✔ For an oral presentation, copy anything from a book, article, or website and present it orally as if it were your own words. You must summarize and paraphrase in your own words and bring a list of references if the professor asks to see it.
- ✔ Use visuals or graphs you got from a book, article, or website without providing the complete reference for the picture or table.
- ✔ Recycle a paper you wrote for another class.
- ✔ Copy from a classmate or use someone else's work as if it were yours.
- ✔ Use technology or smuggle in documents to obtain or check information in an exam.

In writing a paper, it is always better to include too many references than not enough. When in doubt, always err on the side of caution. You must ask your instructor if you have any questions or are uncertain about what cheating is or is not.

In-person and Zoom Office Visits

We are experiencing ongoing changes and uncertainties; communication with the instructor is essential. Please do not wait for an insurmountable problem before considering an office visit. Please speak to me to discuss an issue, assignment, or personal situation.

University Policies
Materials created by the instructor for the course are copyrighted per policy S12-7.

Students are prohibited from recording class activities (including class lectures, office hours, advising sessions, etc.), distributing class recordings, or posting class recordings. Materials created by the instructor for the course (syllabi, lectures and lecture notes, presentations, deliverables, etc.) are copyrighted by the instructor regardless of format. This University policy (S12-7) is in place to protect the privacy of students in the course, as well as to maintain academic integrity through reducing the instances of cheating. Students who record, distribute, or post these materials will be referred to the Student Conduct and Ethical Development office. Unauthorized recording may violate University and State law. It is the responsibility of students who require special accommodations or assistive technology due to a disability to notify the instructor.

Classroom Protocol

Inclusive Learning Community
We are here to learn and support each other. Please be respectful, mindful, patient, and compassionate with yourself, classmates, and instructors. Students are expected to be professionals and be punctual for both online and in-person learning. Questions and comments about lectures or class materials are welcome anytime. Please use my Zoom office hours for assistance or personal concerns. For other SJSU's policies pertaining to Students Expectations, Rights, and Responsibilities, please read University Policy S16-15 [pdf]

Recording of Zoom Classes
University Policy S12-7 [pdf] requires students to obtain instructor's permission to record the course.

The instructor cannot guarantee classes will be recorded and available for review. Unforeseen circumstances due to inadequate internet connectivity or outages may hinder the recording of synchronous classes. Students cannot record or share with others without the instructor's permission.

Additional Information

Dropping and Adding Classes
Students are responsible for understanding the policies and procedures regarding add/drop. Add/drop deadlines can be found on the current academic year calendar on the Academic Calendars webpage. Students should know the deadlines and penalties for dropping classes (Late Drop Information).
Information about the latest changes and news is available at the Advising Hub.
Tuesday, February 18. Last Day to Drop Courses without an Entry on Student's Permanent Record (D)

University Resources for Students
Accessible Education Center
If you need course adaptations or accommodations because of a disability or need to make special arrangements, please make an appointment with me as soon as possible or see me during office hours. Presidential Directive 97-03 [pdf] requires that students with disabilities requesting accommodations register with the Accessible Education Center (AEC) to establish a record of their disability.

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. To schedule an appointment or learn more information, visit the Counseling and Psychological Services website at sjsu.edu/counseling.

SJSU Cares Students experiencing challenges meeting their basic needs, including, but not limited to, access to food, shelter, and a safe space, are encouraged to contact SJSU Cares. Students who feel that their class performance may be affected by these challenges are encouraged to notify their professors if they feel comfortable doing so. Faculty members may be able to provide flexibility within the course for students working with a case manager.

Land Acknowledgement
Land Honor Acknowledgement provided by the CA Faculty Association (CFA) Indigenous Peoples' Caucus: We gather as students, faculty, staff, and community of San Jose State University, situated on the traditional land of the Muwekma, Tamyen, and Ohlone Tribe past and present, and honor with gratitude the land itself and the people who have stewarded it throughout the generations. This calls us to commit to learning how to be better stewards of the land we inhabit as well. To recognize the land is an expression of gratitude and appreciation to those whose territory we reside on and a way of honoring the Indigenous people who have been living and working on the land from time immemorial. It is important to understand the long-standing history

that has brought us to reside on the land and to seek to understand our place within that history. Land acknowledgments do not exist in past tense or historical context: colonialism is a current ongoing process, and we need to build our mindfulness of our present participation. Acknowledging the land is an important Indigenous protocol that we are honoring here today.

Do you know whose land you occupy? Find out at https://native-land.ca/

Course Schedule

This schedule is subject to change with fair notice. I kindly request flexibility in revising due dates, assignments, readings, etc. Students will receive at least one week's advance notification of any changes to the syllabus. Please complete the readings before the class meeting. **Additional guest speakers and field trips will be added to this schedule.**
Thank you!

Week/ Module	Date	Lecture Topics	Readings, Deliverables, and One-Unit On-Line Activities via Canvas
PART I. Environmental Impact Assessment (EIA) in the United States (NEPA)			
1	1/29	Syllabus & TA training "America is Back" (?) NEPA Environmental Review Requirements – Environmental and Energy Law Program	Discuss Syllabus The White House Surfing the Wave of Executive Orders - Legal Planet Trump's War Against NEPA - Legal Planet
2	2/5 New EIA Deliverable: Due on Final Exam Day	SJSU DEIR MEETING Overview: (NEPA) The EIA Process The "Project": Microsoft SJ Data Center (Project Plans & Blue Prints)	(Sanford & Holtgrieve, pp. 21-64) **Regulatory Tracker – Environmental and Energy Law Program** **Federal Environmental Justice Tracker – Environmental and Energy Law Program**
3	2/12 **Guest** Thai-Chau Le: City of San Jose	Assessing Environmental Impacts (EIA substance) Mitigation Measures	(Sanford & Holtgrieve, pp. 65-79) *A Citizen's Guide to the National Environmental Policy Act; Having Your Voice Heard (2021)* *https://ceq.doe.gov/get-involved/citizens_guide_to_nepa.html*
PART II. IRAC Method: Policy Brief, Climate Change, & Environmental Justice (EJ)			
4	2/19 Guest: Ruby Marquez-attorney	**Fieldtrip to Alviso Microsoft SJ Data Center**	Energy: (Sanford & Holtgrieve, pp. 138-149) Review Project Materials on Canvas
5	2/26 New Policy Brief Assignment	EIA-Writing the Report IRAC Method CA Scoping Plan 2022 Carbon Neutrality by 2045 AB 32 Climate Change Scoping Plan	California Air Resources Board	(Sanford & Holtgrieve, pp. 205-217) **Start at (31:52) "2022 Scoping Plan Update and end at (47:50) "2022 Scoping Plan Update Guideposts" https://youtu.be/4-j8YXndITc?si=zlq2MZTezmYM_FuP**
6	3/5 EIA Draft #1 Due Meeting with Márquez	**Guest** Ruth Cueto: City of San Jose Climate Change	(Read Appendix D: Local Actions)

Week/ Module	Date	Lecture Topics	Readings, Deliverables, and One-Unit On-Line Activities via Canvas
7	3/12 Due: Draft Policy Brief in-class Peer Review	Environmental Justice and Social Impacts Healthy Communities, Land Use and Planning - Institute for Local Government	(Sanford & Holtgrieve, pp. 171-181) OPR-SGC Webinar Weds | Environmental Justice Series #2: General Plan EJ Element **https://youtu.be/e9ixYBSFftI?si=Wt05XMnh O4PGq1Gf**
8	3/19 Due: Final Draft Policy Brief	CalEEMod: California Emissions Estimator Model (ozone, precursors, criteria pollutants, and greenhouse gases)	Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity CalEEMod® Tutorials

PART III. Health Impact Assessments (HIA's), Air Quality, & Comment Letters

Week/ Module	Date	Lecture Topics	Readings, Deliverables, and One-Unit On-Line Activities via Canvas
9	**3/26**	Health Impact Assessment (HIA) CA Communities Environmental Health Screening Tool	https://youtu.be/26G51D7X0TA?si=yoYPkvzRITK8U8W 1 https://youtu.be/Z8rwdxqkmxs?si=s78pz9nimpmJrgbF CalEnviroScreen 4.0 - OEHHA
10	**3/31 to 4/4**	**SPRING RECESS**	
11	4/9 New: EIA Comment Letter Deliverable	Reviewing EIA's: Rigor & Adequacy- Prepare Comment Letters Air Quality Issues	(Sanford & Holtgrieve, pp. 115-126) **Health Risk Screening and Modeling** Facility Toxic Emissions and Prioritization Tool
12	4/16	Inclusive Public Engagement - Institute for Local Government	CalEEMod® (Health and Equity Training) **Best Practices for Reducing Near-Road Pollution Exposure at Schools Webinar https://youtu.be/r586QxUG2Og?si=HcMI1EYIqb Zzsj_p**

PART IV. Housing, Transportation, and Cumulative Impacts

Week/ Module	Date	Lecture Topics	Readings, Deliverables, and One-Unit On-Line Activities via Canvas
13	4/23	Housing Curriculum Catch up EIA Draft #2 due-Meeting with Márquez	(Traffic/transport systems: Sanford & Holtgrieve, pp. 193-204) *CEQA's Role in Housing, Environmental Justice, & Climate Change (2021)* CEQA: California's Living Environmental Law | Rose Foundation (rosefdn.org)
14	4/30	**Transportation in California: SB 743 VMT Field Trip to VTA campus -Rob Swierk and Lani Ho (VTA)**	**"Hidden traffic metric that makes cities worse"** *https://youtu.be/UEE4bSWBHdQ?feature=shared* Review: **Congestion Management Program Technical Resources | VTA** *SCC VMT Evaluation Tool*
15	5/7 Due: EIA Comment Letter	Cumulative Impacts CEQA/NEPA documents	Chapter 37 - Preparing Joint NEPA/CEQA Documentation | Caltrans (Sanford & Holtgrieve, pp. 182-192)
Final Exam	Monday, May 19	5:30-7:30 PM **Due: EIA Deliverables**	**EIA and Presentation for Microsoft San Jose Data Center**