**Contact Information**

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Dr. Gary A. Klee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Location</td>
<td>Normally WSQ 115A, but home office during remote semester</td>
</tr>
<tr>
<td>Mobile Phone</td>
<td>(408) 674-1736 (For Emergency Use Only)</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:kleegary@comcast.net">kleegary@comcast.net</a>  You can reach me day, night, and weekends, and get a &quot;same day&quot; response, often within a couple of hours. Please do not use my SJSU e-mail site or SJSU office phone.</td>
</tr>
<tr>
<td>Office Hours</td>
<td>No specific office hours during remote semester. Just email me any day, night, and weekend at <a href="mailto:kleegary@comcast.net">kleegary@comcast.net</a>. You can also host a ZOOM session, but you must first email me so that we can agree on a day and time.</td>
</tr>
<tr>
<td>Class Days/Time</td>
<td>Mondays, 12:00-13:45</td>
</tr>
<tr>
<td>Zoom Link</td>
<td><a href="https://sjsu.zoom.us/j/82387537322?pwd=ZjJ0cHhRU0NuVVVKai9aSkVtWks5dz09">https://sjsu.zoom.us/j/82387537322?pwd=ZjJ0cHhRU0NuVVVKai9aSkVtWks5dz09</a></td>
</tr>
<tr>
<td>Classroom</td>
<td>Presentations via Zoom, plus independent field research &amp; photography.</td>
</tr>
<tr>
<td>Course Format</td>
<td>This is an undergraduate field course. Students may take ENVS 144 to fulfill 4-8 units toward the Department's field requirement; graduate students (with their advisor and Graduate Coordinator approval) may also take this course to satisfy the &quot;Application Science&quot; component of their MS program.</td>
</tr>
<tr>
<td>Faculty 144 Canvas Page and MYSJSU Messaging</td>
<td>Students are responsible for regularly checking MYSJSU Messaging, and Dr. Klee's 144 files on Canvas.</td>
</tr>
</tbody>
</table>
Recommended Course

ENVS 144 is an excellent course for undergraduate and graduate students pursuing an environmental restoration, wildlife resource management, energy, water quality, open space & recreation, environmental education, or coastal resource management focus in the ENVS Department. The course is also strongly recommended for any student or general citizen that lives in California and has an interest in learning about [and hopefully working towards conserving/preserving] California's environmental wetland heritage. It is also recommended for anyone interested in nature and conservation photography because the course provides you with an opportunity to get out and further refine your photographic skills.

Course Description and Requisites

Impact of agriculture, urbanization and other human land uses upon the California coastal wetlands with emphasis on current environmental problems and controversies. State public agencies concerned with vital environmental problems and analysis of current environmental legislation. May be repeated for a maximum of 8 units.

Prerequisite: ENVS 1 or instructor consent.

Misc/Lab: Lecture 2 hours/lab 4 hours.

Letter Graded

Classroom Protocols

How the Course Will Operate

There will be class discussions via Zoom on most Mondays. Part I Introduction 3 weeks); Part II Wetland Signups and Independent Field Research (4 weeks); Part III Student Photo/Video Field Project Presentations (6 weeks); Part IV Reflecting Back: Comparisons, Analysis and Conclusions (1 week). You will be evaluated on Seminar Performance (45%); Photo/Video Field Project Presentation (45%); and Intangibles (10%). Although there will be no written paper, your Photo/Video Field Project Presentation will require the same level of research, organization, and detailed analysis that would go into a written project.

Questions You Need To Ask Yourself Before Enrolling

1. Are you an academically mature student (undergrad or grad) that likes direction, but doesn’t need your hand held through every step of the process?

2. Are you willing to get into your car and travel at your own expense, with a friend or family member to a designated wetland, then explore it, photograph it, interview some officials about it, and report your findings orally back to the class?

3. Since some of these sites will mean an overnight stay for 1-2 nights, are you willing to camp or "motel-it" (at your own expense) at a nearby accommodation so that you can at least be at the site for two-three days? The best days to be on site are mid-week because you won’t find any agency people working on weekends.

4. Are you interested in wetland issues, and enjoy getting outdoors, away from the computer screen?

5. Do you like to hike and photograph water landscapes, plants, and birds?

6. Do you like to do the detective investigative work (kind of like being a CSI Investigator) of finding out what you can learn from related topographic maps, historical photographs, and current aerial photographs?

7. Do you like the idea of doing research independently as opposed to working in a team with 3-4 other students?

If you answer “Yes” to most of these questions, then ENVS 144 is for you! If the answer is “No,” then Dr. Klee suggests you talk to your advisor about substituting another class.

Classroom Protocol

Students are expected to attend and “engage” daily and arrive to Zoom class on time. So that I can start the class exactly on
time, it would be especially appreciated if you actually arrive 5-10 minutes early. I will have the Zoom room open 15 minutes prior
to the hour, and be available for Q&A. Cell phone ring tones are to be turned off. And, without question, being courteous and
respectful to all classmates is absolutely mandatory.

Statement Regarding Required Hours for a 4-unit, In-person Course
At SJSU, students are expected to spend at least two hours outside of class for every 1 hour of in-person class time. Because this
is a 4-unit course, you can expect to spend a minimum of 8 hours per week completing class-related assignments in addition to
the in-person class meeting. For additional details, see file “University Guidelines for Units/Workload” on my faculty web page.

Statement Regarding Disability
If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the
building must be evacuated, please make an appointment with the Accessible Education Center (AEC). Presidential Directive 97-
03 requires that students with disabilities requesting accommodation must register with AEC to establish a record of their
disability. *If you are aware of a disability now, register within the first three weeks of class. Do not wait until an assignment is
due.*

Statement Regarding Cheating & Plagiarism
It is the student’s responsibility to be familiar with SJSU policies on cheating & plagiarism. See SJSU Home>CS 100W: Technical
Writing>SJSU Policies: Prerequisites. You must also be familiar with the ENVS 100W Instructor’s Handbook on Plagiarism and
Academic Integrity.

One example of cheating: 1.1.3.: “Submitting work simultaneously presented in two courses, unless this has been approved
by both course instructors or by the department policies of both departments.”

One example of plagiarism: 1.2.1.: “The act of incorporating the ideas, words, sentences, paragraphs, or parts of, and/or the
specific substance of another’s work, without giving appropriate credit, and/or representing the product as one’s own work.”

THERE ARE MANY OTHER EXAMPLES. STUDY THE ABOVE DOCUMENTS, OR BE CAUGHT IN ONE OF THE GREATEST SINS YOU
CAN COMMIT IN ACADEMIA, AND WATCH YOUR GRADE AND MORE IMPORTANTLY, YOUR REPUTATION, GO DOWN IN FLAMES.
If you have questions, always ask prior to submitting any written document to me.

Program Information
The Environmental Studies Department offers three Environmental Studies Undergraduate Degrees:

Bachelor of Science Degree
The Bachelor of Science degree in Environmental Studies is designed to prepare students for career opportunities in water resource
management, biological resource protection, sustainable agriculture, renewable energy, environmental health and safety,
environmental impact assessment, environmental restoration, and wilderness, park, and open space resource management.

Bachelor of Arts Degree
The Bachelor of Arts degree is designed to prepare students for career opportunities in environmental resource management,
environmental communications, environmental design, environmental regulation and policy, integrated waste management, human
ecology, government agencies, non-governmental organizations, environmental planning and environmental advocacy.

Bachelor of Arts Degree, Preparation for Teaching
This major is designed for students interested in teaching in elementary school or middle school. Students who wish to pursue a high
school teaching career should complete a BA or BS in Environmental Studies in consultation with the advisor.

These programs share the following program learning objectives:

PLO 1 Write a logical analytical paper using good writing style and construction supported by appropriate research.
PLO 2 Determine, apply and interpret appropriate basic statistical or other quantitative analyses to environmental data.

PLO 3 Develop proficiency in the interdisciplinary sustainability principles that are the foundations 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.

PLO 4 Productively conduct group/team work to deliver professional quality presentations and reports and also engage in community service and democratic participation.

PLO 5 Demonstrate in-depth knowledge and skills in a science or technical field (BS) or non-science field (BA and Preparation for Teaching).

Course Goals

Course goals and objectives:

- To introduce students to the subject of wetlands, specifically the types & location of California coastal wetlands.
- To introduce students to the range of perspectives on wetlands—from the social science perspective of the geographer, urban planner, economist, & political scientist, to the science perspective of the biologist, botanist, and restoration ecologist, and to the artistic perspective of the nature photographer and landscape painter.
- To introduce students to the city, county, state, & federal government agencies involved with protecting wetlands, as well as the environmental and non-profit key players.
- To introduce students to the environmental issues and conservation strategies associated with wetlands.

Course Learning Outcomes (CLOs)

Upon successful completion of this course, students will be able to:

- Define the meaning of “wetlands,” provide an extensive list of wetlands in California, and describe the value of these lands to biodiversity and human society in a way that would engage a wide audience.
- Describe the range of public and private ownership and management of California wetlands, discuss the history of wetland protection, discuss the policies associated with wetland protection, and describe the implications of different types of ownership on wetland conservation.
- Understand photographic and digital mapping tools wetland managers must know to implement conservations, tools such as photography, aerial photos and images, topographic maps, and GPS.
- Convey an understanding of wetland conservation by:
  a) Preparing a detailed field analysis of a particular site that incorporates appropriate peer-reviewed and grey literature and critically analyze agency policies & conservation strategies, and
  b) Presenting this information in a comprehensive, interesting, & credible photo/video presentation.

Course Materials

REQUIRED READINGS:

- All files on Dr. Klee’s 144 Canvas page.

RECOMMENDED READINGS:


Wetlands

Author: Sharon L. Spray & Karen L. McGlothlin
Publisher: Rowman & Littlefield Publishers
This is an excellent undergraduate level introductory book on wetlands for ENVS majors. Why? Because it provides a well-balanced discussion between the sciences and social sciences. Download Kindle version from Amazon. The Kindle version is approximately $38.00. You can also buy less expensive used paperback versions from Amazon.

Wetlands

Author: William J. Mitsch and James G. Gosselink  
Publisher: John Wiley and Sons  
Edition: 5th Edition  
Optional  
Price: $115  

This book probably still remains the very best overall book on wetlands. However, the book is better suited for advanced or graduate level students that already have some background in the subject of wetlands. Furthermore, it was very expensive, approximately $115.00. In sum, I only recommend this book if you are very, very serious about studying wetlands. You do not need this book to get an “A” in this “intro” class.

Course Requirements and Assignments

- Seminar Performance. . . . . . . . . . . . . . . . . . 45%  
  [Includes daily participation & serious interaction with the class. Daily participation is recorded by Dr. Klee or his T.A.]
- Photo/Video Field Project Presentation. . 45%  
  [See details below about each project].  
- Intangibles . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10%  
  [Attitude, initiative, motivation, dependability, punctuality, and helpfulness to others.]

See Canvas file, 144 Term Grade (Remote), and other Canvas files related to this project.

A SPECIAL CAUTIONARY NOTE ABOUT PARTICIPATION:

In this class, one simply does not arrive late nor miss class. Furthermore, participation means “engaging” in the class discussion and student presentations, not just sitting in your chair. Dr. Klee expects you to behave like a mature university student. While he cannot fire you the way a boss could, he can definitely determine your Seminar Grade accordingly. More importantly, your performance in ENVS 144 will determine whether he writes, or does not write, a letter of recommendation on your behalf for graduate school or a job.

Final Examination or Evaluation

On the last day of class, every student will be evaluated on their comprehension and analysis of the course material. Their 3-minute final oral presentation will be part of their Seminar Performance Evaluation.

Grading Information

On Dr. Klee’s 144 Canvas page, see 144 Term Grade (Remote). See above for how the three major criteria (Seminar Performance, Photo/Video Field Project Presentation, and Intangibles) are weighted.

Determination of Term Grade

- The points from your Seminar Performance (45%) and Photo/Video Field Project Presentation (45%) are first tallied.
- Then, Dr. Klee may (or may not) raise or lower the subtotaled points based on the following important Intangibles as your attitude, improvement over the semester, initiative, motivation, dependability, and ability to work with fellow colleagues (10%). In other
words, he is always asking himself the following:

- Would he want to work with you as a colleague?
- Would he write you a letter of recommendation if requested?
- Would he offer you a job if he had a chance?

## University Policies

Per [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on [Syllabus Information web page](https://www.sjsu.edu/curriculum/courses/syllabus-info.php). Make sure to visit this page to review and be aware of these university policies and resources.

## Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Assignment Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon. 1/30</td>
<td>PART I: INTRODUCTION</td>
<td>Assignment Due: Order from Amazon: (1) Spray &amp; McGlothlin book (Kindle Version)</td>
</tr>
<tr>
<td></td>
<td>A. Course description</td>
<td>Have downloaded all 144 Canvas files to your laptop and/or phone.</td>
</tr>
<tr>
<td></td>
<td>• 144 Syllabus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 144 Term Grade (Remote)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 144 Reports to Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 144 Biography Sheet and Self-Photo</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>[IMPORTANT: PRIOR TO MONDAY OF NEXT WEEK, YOU MUST EMAIL ME YOUR BIOGRAPHY SHEET AND SELF-PHOTO]</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>[Students: Items in italic are Canvas files]</strong></td>
<td></td>
</tr>
<tr>
<td>Mon. 2/6</td>
<td>B. Gary Checks your Biography Sheet and Self-Photo</td>
<td>Biography Sheet and Self-Photo</td>
</tr>
<tr>
<td></td>
<td>C. Student Introductions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. Additional explanation of field research, photo/video presentation, and term grade criteria</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 144 Reports to Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 144 Term Grade (Remote)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>[DUE PRIOR TO NEXT CLASS]</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Have emailed Gary 3 preferred wetlands in ranked order (1st, 2nd, 3rd).</td>
<td>Example:</td>
</tr>
<tr>
<td></td>
<td>1. Smith River, Del Norte County</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Arcata Marsh &amp; Wildlife Sanctuary, Humboldt County</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Big River, Mendocino County</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. If time, Gary’s Coastal Wetland Book Project (slide show) (e.g., Tijuana Wetland, S.D. County)</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
<td>Assignment Due</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mon. 2/13</td>
<td>F. Report on initial student wetland signups (<code>1st come/1st serve</code>)</td>
<td>Spray &amp; McGlothlin: Ch. 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>G. Some useful Canvas files for your research</td>
<td>Have emailed Gary 3 preferred wetlands (including county) in ranked order (<code>1st</code>, <code>2nd</code>, <code>3rd</code>) prior to this date.</td>
</tr>
<tr>
<td></td>
<td>- 144 Sources to Checkout</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 144 California Coastal Project Aerial Photos</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 144 National Wetlands Inventory Map - Directions to Find Map</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 144 Interview Questions You Should Cover</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 144 Presentation Day Guidelines (Photo Essay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H. Gary provides more examples of wetlands from his own field research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(e.g., Klamath River, Del Norte County).</td>
<td></td>
</tr>
<tr>
<td>Mon. 2/20</td>
<td>PART II: WETLAND SIGNUPS &amp; INDEPENDENT FIELD RESEARCH</td>
<td>Spray &amp; McGlothlin: Ch. 3 &amp; 4</td>
</tr>
<tr>
<td></td>
<td>A. Signups Finalized (What is your emphasis?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Final Q&amp;A Regarding Field Research &amp; Photo/Video Presentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[More examples from Gary’s field research: Huntington Beach (Orange County) &amp; Goleta Slough (Santa Barbara County)]</td>
<td></td>
</tr>
<tr>
<td>Mon. 2/27</td>
<td>NO ZOOM CLASS—EXTRA TIME FOR FIELD WORK &amp; PHOTO/VIDEO PREPARATION</td>
<td>Spray &amp; McGlothlin: Ch. 5 &amp; 6</td>
</tr>
<tr>
<td></td>
<td>(However, you can still email, phone, or host a Zoom private session on most any day)</td>
<td></td>
</tr>
<tr>
<td>Mon. 3/6</td>
<td>NO ZOOM CLASS—EXTRA TIME FOR FIELD WORK &amp; PHOTO/VIDEO PREPARATION</td>
<td>Spray &amp; McGlothlin: Ch. 7 &amp; 8</td>
</tr>
<tr>
<td></td>
<td>(However, you can still email, phone, or host a Zoom private session on most any day)</td>
<td></td>
</tr>
<tr>
<td>Mon. 3/13</td>
<td>NO ZOOM CLASS—EXTRA TIME FOR FIELD WORK &amp; PHOTO/VIDEO PREPARATION</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(However, you can still email, phone, or host a Zoom private session on most any day).</td>
<td></td>
</tr>
</tbody>
</table>
### PART III. PHOTO/VIDEO PROJECT

PRESENTATIONS BEGIN [25 minutes/student]

1. ________________
2. ________________
3. ________________

All students must be prepared to present today. Today’s presenters will be picked from a hat. *One half letter grade off your seminar grade (e.g., A- to B+; C to C-, etc.) if I call upon you and you are not prepared to present. The same will hold true for the following presentation days.*

### Spring Break: Campus Closed

Mon. 3/27

### Remaining Students Must Be Prepared to Present Today. Today’s Presenters Will Be Picked From A Hat.

Mon. 4/3

1. ________________
2. ________________
3. ________________

REMAINING STUDENTS MUST BE PREPARED TO PRESENT TODAY. TODAY’S PRESENTERS WILL BE PICKED FROM A HAT.

Mon. 4/10

1. ________________
2. ________________
3. ________________

REMAINING STUDENTS MUST BE PREPARED TO PRESENT TODAY. TODAY’S PRESENTERS WILL BE PICKED FROM A HAT.

Mon. 4/17

EARTH DAY WEEK: NO ZOOM CLASS

Mon. 4/24

1. ________________
2. ________________
3. ________________

REMAINING STUDENTS MUST BE PREPARED TO PRESENT TODAY. TODAY’S PRESENTERS WILL BE PICKED FROM A HAT.

Mon. 5/1

1. ________________
2. ________________
3. ________________

REMAINING STUDENTS MUST BE PREPARED TO PRESENT TODAY. TODAY’S PRESENTERS WILL BE PICKED FROM A HAT.
REMAINING STUDENTS MUST BE PREPARED TO PRESENT TODAY. TODAY’S PRESENTERS WILL BE PICKED FROM A HAT.

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Assignment Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon.</td>
<td>(1)___________________</td>
<td></td>
</tr>
<tr>
<td>5/8</td>
<td>(2)___________________</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3)___________________</td>
<td></td>
</tr>
<tr>
<td>Mon.</td>
<td>PART IV: REFLECTING BACK: WETLAND COMPARISONS, ANALYSIS &amp; CONCLUSIONS</td>
<td></td>
</tr>
<tr>
<td>5/15</td>
<td>EVERY STUDENT WILL HAVE 3 MINUTES TO MAKE SPECIFIC OBSERVATIONS AND</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COMPARISONS ABOUT THE WETLANDS DISCUSSED IN THIS CLASS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Note: During the semester break, all are welcome to bring a friend and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sail Monterey Bay. See Canvas file: Sailing the Monterey Bay, L. Dock.</td>
<td></td>
</tr>
</tbody>
</table>