

San José State University
College of Social Sciences, Department of Geography & Global Studies
CRN# 49206, GEOG279, Geographic Information Science Applications, Fall,
2016

Course and Contact Information

Instructor:	Kerry Rohrmeier, Ph.D.
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Office Hours:	Tuesdays 4:00-6:00 pm and by appointment
Class Days/Time:	Online plus one in-person meeting on 8/29 from 6:00-9:00pm in WSQ111
Classroom:	Online (Canvas)
Prerequisite	Instructor Consent

Course Format

Online Course

With the exception of one in-person meeting this course is taught entirely online. Students need Internet connection and specialized software to participate in class activities. Please let me know if you need an ArcGIS 10.4 license.

MYSJSU (Canvas Announcements)

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on [Canvas Learning Management System course login website](http://sjsu.instructure.com) at <http://sjsu.instructure.com>. You are responsible for regularly checking with the course management system through [MySJSU](http://my.sjsu.edu) at <http://my.sjsu.edu> to learn of any updates via announcements.

Course Description

From SJSU Catalog: Research in applications of geographic information science in such areas as urban spatial analysis, environmental analysis, geo-demographic analysis, regional analysis, facilities management, and geographic education. (3-units)

Course Learning Outcomes (CLO)

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

- CLO 1 *Demonstrate the ability to define a research problem and design and execute a research program.*

All course assignments plus the final paper require independent sourcing, reading, and analytical techniques to support each geography graduate student's self-selected research problem and program. The final paper is customized to each student so that his/her work effort is applicable to his/her own graduate study.

- *CLO 2 Demonstrate the ability to communicate research results in written, graphic, and verbal form.*

Students will present their specific research through written assignments, presentations, and display charts, graphs, and maps each week. Students will also work together to create and perform 15 laboratory exercises pertinent to varied research methods.

- *CLO 3 Demonstrate understanding of how GIS and technology may be applied to a variety of problems.*

ArcGIS, and open source alternatives, are spatial analyses and geostatistical tools used for problem solving and the focus of this course.

Required Texts/Readings

Textbook

No textbook is required for this course. Weekly content will be posted in the Canvas 'files' tab or linked to the course schedule.

Technology Requirements

ArcGIS 10.4 is required for this course. Students must download this latest software version, and if needed can email me for a free 1-year student license code.

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so forth.

- 1) Active online participation in this course is mandatory given our limited time together on 8/29. It is unlikely to sufficiently contribute to this class without completing all required preparations (CLO3).
- 2) Each graduate student will be designing a laboratory exercise for their classmates to complete based on their own research interests and methodologies. Undergraduate students enrolled in this course will do this assignment in pairs. This lab must include useful background materials (such as a peer-reviewed readings and working datasets) plus explicit step-by-step instructions for conducting a desired GIS analysis. A sample visualization (map, chart, graph, etc.) should be included along with these instructions. Also a short, recorded video tutorial demonstrating all necessary components of the graded final product is needed (i.e. show us in a short video what an A+ map constitutes).
- 3) Each student must complete the other 14-laboratory exercises his or her classmates have created. There will be one per week posted to Canvas on Monday morning. Reminder: our course includes students from other disciplines so labs will range in topic and procedure based on others individual research lines (CLO1 and CLO2).
- 4) Graduate students are expected to participate in professional associations within their field, but impressive undergraduates are also encouraged to do so. When geography is considered as a whole discipline then American Association of Geographers (AAG), and more regionally Association of Pacific Coast Geographers (APCG), are considered to be the authority organization. Students are required to submit an abstract to present either a research poster or a research talk at any one conference to be held during this academic year (CLO2). Please choose a conference befitting your research. Note: most major conferences

call for abstracts in EARLY fall for meetings held in spring [ex: the deadline for AAG this year is October 27]. Whenever possible students should team up to form a panel since this lessens the pressure of speaking amongst strangers.

- 5) Each year Geography Awareness Week falls during the fall term. Let's celebrate geography as a fascinating and varied academic community; participation in the two events scheduled is for course credit. You are strongly encouraged to be there in-person but if this absolutely impossible then alternate arrangements have been offered and explained on the course schedule.

Final

- 6) The final is customizable to each student's desired goal for this course - whether it is a research proposal or project/thesis chapter (CLO1). Undergraduate students are encouraged to write a Letter of Interest, Statement of Purpose/Research, and Curriculum Vita for a prospective graduate program. This individual assignment must be a minimum of 3,000 words (include a word count) exclusive of front and back materials, figures, tables, and/or appendices. All written work should be referenced and formatted to meet submission guidelines of the AAG, that being Chicago 15th edition.

Grading Information

	Points Possible
Participation	100
Lab Exercise Creation	250
Lab Video Tutorial	50
14 Classmate Lab Exercises	700 (50-each)
Conference Abstract	50
Geography Awareness Week Events	50 (25-each)
Final Exam Essay	300
TOTAL	1,500

SCALE:

A+ = ≥98%	A = 94-97%	A- = 90-93%
B+ = 87-89%	B = 84-86%	B- = 80-83%
C+ = 77-79%	C = 74-76%	C- = 70-73%
D+ = 67-69%	D = 60-66%	D- = 51-59%
		F = ≤50%

All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades. In keeping with this policy, and to making grading responsive. All assignments are due as stated on the Course Schedule and Canvas. **Late work is not accepted.** Please save all your work until after you have checked your final course grade. Then if you have questions about your final grade, you can bring in past work, and if necessary, corrections can be made.

Online Class Protocol

- Readings and preparatory work must be done prior to addressing forum prompts to ensure complete and thought provoking discussion.
- Plagiarism in any form is unacceptable and will merit a 0 for the assignment.
- This course covers political content so civility and courteousness is always expected. While we may not

agree with other perspectives and opinions stated, respect is mandatory.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>"

49206 / Geographic Information Science Applications, Fall 2016, Course Schedule

This schedule is subject to change with fair notice so please refer to Canvas often for announcements.

Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	8/24-8/28	Review Draft Syllabus
2	8/29	Meeting WSQ111 @ 6:00pm for Intros, Discuss Course Expectations, Dr. Kathrine Richardson Visit, Finalize Course Content, Select Final Outcomes, Go Over Grad School Tips
	9/1	WELCOME EVENT Happy hour sponsored by the Department at Billy Berks in downtown San Jose at 5:30-7:30pm
	8/29-9/4	Self-Select Final Outcome for the Course. Send via email Lab 1 by Ana Rivera, MA Geography – Urban Heat Effect
3	9/5-9/11	Lab 2 by Yebo Wang, MA Geography – 3D Viewshed & Crime Analysis
4	9/12-9/18	Lab 3 by Anne Nyquist Skancke, MA Geography/Urban Planning – Activated Alleyways)
5	9/19-9/25	Lab 4 by Eric Wilhelm, MA Geography – Olympic Facilities Planning
6	9/26-10/2	Lab 5 by Kelli Sullivan, MA Applied Anthropology – TBD
7	10/3-10/9	Lab 6 by Kaylan Hagar, MA Geography – TBD Conference Abstracts Due
8	10/10-10/16	Lab 7 by Katrina Kane, MA Linguistics – TBD
9	10/16-10/23	Lab 8 by Nolan Bertuca, MA Geography – TBD
10	10/24-10/30	Lab 9 by Allison Gibson, MA Geography – TBD
11	10/31-11/6	Lab 10 by Amber Villa, MA Geography – TBD
12	11/7-11/13	Lab 11 by Elisabeth Wilkinson, MS Environmental Sciences – TBD
13	11/14-11/20	Lab 12 by Tuan Lu, MA Geography – TBD
	11/15	GEOGRAPHY AWARENESS WEEK EVENT Attend lecture and film screening of <i>TroubleMakers: The Story of Land Art @ SJSU</i> from 6:00 – 9:00 pm (room TBD). If you are unable to make it in person you can stream the film online. In place of Q&A participation you can respond to discussion prompts posted in an online forum.
	11/16	GEOGRAPHY AWARENESS WEEK EVENT World GIS Day #missingmaps map-a-thon from 7:00-9:00 pm nearby campus (location forthcoming). If you are unable to attend in person then you may contribute to this humanitarian effort remotely.
14	11/21-11/27	Lab 13 by Justine Cuevas, MA Geography – TBD
15	11/28-12/4	Lab 14 by Daisy Gutierrez, MA Geography – TBD
16	12/5-12/11	Lab 15 by PoYee Chan & Sean Silveira, Honors Seniors Geography – TBD
Final	12/16	Submit Final by 11:59pm