Teaching Assistants (contact information for your TAs can be found on the course website): Luis Alvarez, Sarah Halterman, Corey Rovzar and Jason Ward.

Course Description: The purpose of this course is to introduce students to fundamental principles and concepts behind the use and application of geographic information systems (GIS). Students will learn how to think spatially, become familiar with information technology, and learn how to conduct data analysis with GIS. Key concepts and ideas are reinforced through lab assignments and activities with GIS. This course fulfills several GE requirements (see UCLA course catalog for details). There are no prerequisites for this course.

The online course format requires a significant amount of independent work and time management.

Course Objectives: There are three objectives to this course:

1. Develop, sharpen and reinforce your geographical knowledge and spatial awareness;
2. Demonstrate how a geographic perspective can complement, extend and be applied across the physical, biological, environmental and social sciences;
3. Learn about the research process, and in particular how research questions can be formulated, refined and answered with geographic information systems (GIS).

Course delivery method: There are NO classroom lectures for this course. Course content will be available to students online. Assignments will be introduced, discussed and worked on in regularly scheduled weekly lab sections. This permits students to learn and review course content in a flexible manner, and makes more effective use of lab time by having students engage in problem-solving activities. All course materials will be made available to each student via Moodle and the course website on a rolling basis (i.e., new content released each week).

The Discussion Forum on the course homepage will serve as the primary venue for ALL QUESTIONS related to the course.

Lab sections
All lab sections - both on-campus and online - begin the FIRST FULL week of the quarter (i.e., the first 5 day week). All students must be registered for either an on-campus or online lab section to complete GEOG7. Be sure to double-check both the lab section and type of section in which you are enrolled. All GEOG7 labs are "synchronous". This means that each lab meets at a regularly scheduled time each and every week during the quarter.

Attend your lab prepared! Since assignments are posted on Monday, it is expected that you come to lab having already reviewed the weekly assignment, and that you have also already started to work on it. Come prepared with specific questions, helpful pointers and suggestions for your classmates to get the most out of the labs. Lab sections serve as the arena where students can meet, collaborate, share ideas and work together. You are permitted and encouraged to work together but the grading rubric for your weekly assignments includes a creativity and originality component to encourage and recognize independent work.
FOR STUDENTS REGISTERED IN ON-CAMPUS LAB SECTIONS:

- Lab sections meet in either 2035B or 2035H Public Policy (Social Sciences Computing lab). Check your schedule to confirm where your lab meets;
- Due to space limits, you must attend the lab section in which you are registered;
- **WARNING!** - Switching between lab sections is not permitted. If you drop the course in an attempt to switch sections, you will lose your spot in the course because you will be placed behind students already on the waitlist. The TAs and professor have no control over this process.

FOR STUDENTS REGISTERED IN ONLINE LAB SECTIONS:

- Lab sections will meet online in a virtual classroom facilitated by the cloud video conferencing platform, Zoom. To attend an online lab section, click on the ‘GEOG7 Online Lab Section’ link found in the Online Lab Sections area of the course webpage at the starting time of your lab. Zoom will ask you to click on the ‘Launch Application’ button, and ask that you enter your name for your lab session. Your TA will host each lab session, guide discussions, and assist with questions.

**PLEASE NOTE:** This course format requires a significant amount of independent work and time management. Students have the flexibility to complete each week’s assignment at any time during the week, but it is strongly recommended that you schedule **at least ten hours** per week on your calendars and outside of labs to dedicate to this course. In some weeks, the course may take more time, and other weeks, it may take less time. You will be given the structure, resources and guidance for learning the course content, but it is ultimately your responsibility to complete assignments on time, to learn new methods when necessary, and to seek out and share information as needed to complete the course successfully. You are expected to stay engaged and informed about the course by attending lab, reading the weekly announcements, and posting to and participating in the course forum. Students may, of course, interact with the professor, TAs or other students via the forum or during office hours.

**Each student is responsible for the following:**

- Completely reading the syllabus and understanding course requirements;
- Staying informed and up-to-date on all course-related work each and every week;
- Attending labs, reading announcements and participating in forums;
- Completing all coursework by the assigned deadlines;
- Posting and answering questions about the course and assignments to the course forum for the benefit of other students.

**Course resources & learning how to learn (online and independently)**

There is no formal text for this course; rather, course content will take a variety of forms and formats such as PDF readings, online content, screencasts and online videos. You are encouraged to take advantage of these and other resources that you have access to in order to get the most out of this course. This may mean watching a video more than once or finding an alternative resource through a search of the internet. Please share any and all resources that you find valuable with others on the Discussion Forum to enrich the learning of others as well.

**Technical requirements**

Most content for this course can be accessed with any computer or laptop with internet access. Several items can also be accessed via smartphone and tablet. To ensure consistency across lab sections and assignments, the following applications are considered to be the standard for the course: Mozilla Firefox; Google Docs; MS Excel; and Quantum GIS (QGIS, version 2.2 or greater). All assignments can be completed on a Windows, Mac or Linux computer.
Communications Protocol
Given the large number of students enrolled in the course, it is neither practical nor efficient to respond to questions via email. Therefore, the Discussion Forum on the course website will be the primary venue for ALL communication. To ensure that questions are answered in a timely manner and to benefit all students, the following communication protocols for the course have been established.

- Post ALL questions related to the syllabus, course requirements, course organization, weekly assignments, and course content to the Discussion Forum on the course homepage so that everyone can benefit;
- Direct questions about lab access, student accounts, Moodle, and technical problems in the computing labs to the Social Sciences Computing help desk (support@ssc.ucla.edu);
- For questions about grading and labs, contact the TA for your section;

Email should only be used to schedule one-on-one, in-person or online meetings with the professor if you cannot attend regular office hours. Use “GEOG7 Meeting request” as the subject of the email. Include in your message at least two 30 minute time slots when you can meet and a brief (i.e., one or two sentences) description of the purpose of the meeting.

Helping yourself and helping others
Another important objective to this course is learning how to learn, and more importantly, learning from and teaching others. To facilitate collaborative learning, students are expected to contribute to the course Discussion Forum by both asking and answering questions. Forum posts should be specific and informative. Posts that contain questions that are ambiguous (e.g., “Help, I’m stuck!”) or where the answer is obvious (e.g., “What is this week’s deadline?”) may not receive a response. Any requests for others to complete any work (e.g., “What is the answer to X quiz question?”), or that include unconstructive remarks (e.g., “This week’s assignment $ux!”), will be also be ignored and may be removed.

Review the ‘Getting help” video to make and get the most out of the Discussion Forum. An active forum will make the course a more effective and rewarding learning experience for everyone, and the TAs and professor will take note of regular contributors. The Discussion Forum will be monitored daily by the TAs and professor, but do not expect immediate responses or responses from the TAs or professor during weekends. Please allow up to 24 hours for a response, and if you know the answer to a posted question, please respond.

Course requirements & evaluation procedures

Syllabus quiz (5%): Under the ‘Week 0: Preliminaries’ section on the course webpage there is a quiz about the syllabus to ensure that course requirements and expectations are understood. This quiz will count 5% towards your final grade. You can take the syllabus quiz as many times as needed to get the score you want. To access the syllabus quiz, you must first complete the Plagiarism Quiz and Academic Integrity Agreement located under the ‘Code of Conduct’ section. The syllabus quiz must be completed by Sunday at 11.55pm at the end of Week 1.

Weekly thematic forum participation (10%): A total of 10% of your final grade will be based upon your weekly participation in the thematic forum. A thematic forum will appear under each unit to which you must contribute a thoughtful response or comment. Unless otherwise specified, all forum postings must be at least 150 words, and written in complete sentences with correct grammar and spelling. Civil dialogue, debate and discussion are expected in all forums and postings. Any inflammatory or derogatory postings will not be tolerated, and all postings will be moderated for proper “netiquette”. Any attacks, flaming or inappropriate commentary or postings will be removed and result in no credit for this segment of the course. Forum posting deadline for all sections is Friday at 11:55PM.
Weekly quizzes (15%): You are also required to complete a weekly quiz. To gain access to the following week’s content and assignment, you must earn a score of 70% or better. A 20 minute waiting period is enforced between unsuccessful quiz attempts (i.e., <70%). You can take the weekly quiz as many times as needed to access to the following week's content. Your highest quiz score will be recorded and saved by Moodle each week, and will be used in the calculation of your final grade.

**Note that after each quiz attempt, only your quiz score is visible.** You will not see which questions you answered correctly or incorrectly. The rationale behind this policy is that if you do not know which question(s) you answered incorrectly, you must assume that all of the questions that you were not 100% sure about were wrong. This quiz reporting method encourages you to study and review content associated with questions that you were unsure about but may have guessed correctly, in addition to the ones that you did not know. It forces you to learn all the material. You only need to score 70% or above to access the following week’s content, but you can take the quiz as many times as you want to obtain the highest score desired.

Note that you are **NOT** permitted to post any answers to the quiz on any of the forums. Any instances of academic dishonesty that are uncovered will result in a zero for ALL quizzes. The *weekly quiz deadline for all sections is the second Tuesday that follows the Monday course content posting at 11:55PM* (i.e., eight days after content is posted). If you miss the deadline for a quiz, you will receive a score of zero. You must also make arrangements with your TA to access the quiz, but still must score 70% or above to access the following week’s content.

Weekly assignments (40%): Students are required to complete a weekly lab assignment that complements course content. Weekly lab sessions, run by the TAs for the course, are dedicated to reviewing previous assignments and course content, introducing procedures and the current assignment, and to helping students get started. Due to limited space in the lab, you must attend the section in which you are registered. Weekly assignments are to be submitted via the Moodle website for the course. Grading rubrics will accompany each assignment. **Weekly assignment deadline for all sections is the Sunday before each lab section at 11:55PM.**

Practical midterm (15%): A practical midterm will be administered in week 5 of the course. Details about the midterm will be announced Week 4.

Final project (15%): You are required to create a final GIS project that is focused on an issue in the physical sciences, social sciences or human-environment interactions. You will be given the general parameters of your final project during Week 10, and are responsible for conducting the GIS-based analysis and write-up of results. **The final deadline for all sections will be announced in Week 10.**

**Grading in GEOG7 is NOT curved.** It is your responsibility to track your own progress through the course. Preliminary and in-progress grades will not be provided.

**Late policy**
For each 24 hour period that an assignment is late, beginning immediately after the deadline passes according to the Moodle system clock, your score will be adjusted downward by 20%. In other words, your assignment is considered to be submitted late at 12:00:01AM, Monday. Work that is more than five days late will **NOT** be graded and will receive a zero. Extensions are granted only under the most pressing of circumstances and must be arranged with your TA.

**Academic Honesty**
All students are expected to demonstrate integrity in your academic endeavors. You are evaluated on your own merits. Cheating, plagiarism, unauthorized collaborative work, multiple submissions without
the permission of the professor or any other form of academic dishonesty are considered unacceptable behavior and will result in a failing grade (i.e., ‘F’) for the course

Summary of course deadlines

- The syllabus quiz must be completed by Sunday at 11.55pm at the end of Week 1.
- Forum posting deadline for all sections is Friday at 11:55PM.
- Weekly quiz deadline for all sections is Tuesday at 11:55PM.
- Weekly assignment deadline for all sections is Sunday at 11:55PM.
- Final project deadline will be announced in Week 10.

Week 0: Preliminaries & Introductions

Be sure to complete following items:
- Plagiarism quiz;
- Student conduct and academic integrity agreement;
- Syllabus quiz; and,
- Student questionnaire;
- Introduce yourself of ‘Welcome & Introductions’ thread of course Discussion Forum.

You will be granted access to the content for Week 1 upon completion of the above items.

Week 1: What is geography?
Assignment #1: Working with tabular data

Week 2: Survey of geographic information technology
Assignment #2: Climographs & Reference Maps

Week 3: Maps & Mapping
Assignment #3: Choropleth Mapping

Unit 4: Maps & Research
Assignment #4: Map selection and queries

Week 5: Practical Midterm

Unit 6: Geographic Coordinate Systems & Map Projections
Assignment #5: Geocoding & Map Projections

Week 7: Map abstraction
Assignment #6: Working with raster data

Unit 8: Basics of spatial databases
Assignment #7: Mapping the US Census

Week 9: Basic Spatial Analysis & Geoprocessing
Assignment #8: Geoprocessing

Week 10: Final project assigned
Open lab session to work on Final Project

*NOTE: Course content may vary or be adjusted in order to meet the needs of the class.