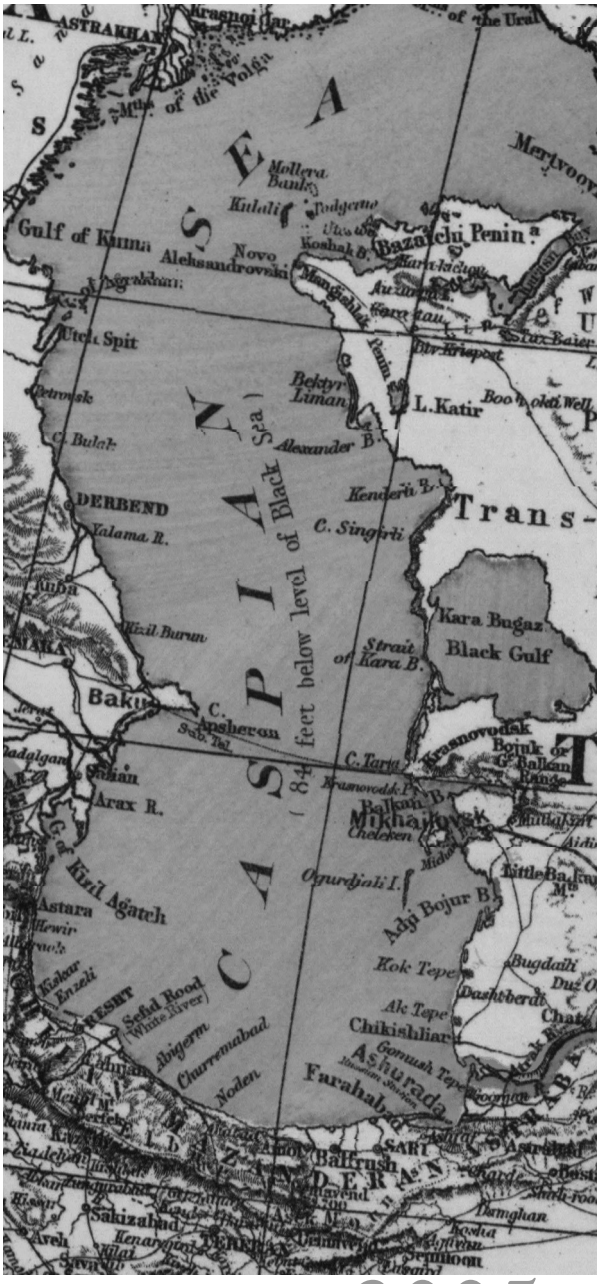
geography 101

Physical Geography



caspian sea, map of russian territories in central asia, 1855
library of congress

SPRING 2005

MONDAY/WEDNESDAY 8:00AM

Dr. Selkin *pselkin@sdccd.net* *(619)388-3643*

GEOGRAPHY 101: PHYSICAL GEOGRAPHY

Monday & Wednesday, 8:00-9:25 AM
San Diego City College, B203
Instructor : Dr. Peter Selkin

ABOUT THIS CLASS

Have you ever looked out an airplane window and wondered what you were flying over? Marveled at the beautiful patterns of fields or clouds or mountains? Cursed the weatherman on the evening news? In this course, we will use aspects of physics, chemistry, geology, biology, and even astronomy to give us a picture of the *patterns* of landscapes and the *processes* that shape the earth's surface environment. Some topics we will address are:

- How fast are the sea cliffs in La Jolla eroding away?
- Can you really track individual people on satellite photos like they do in spy movies?
- What is the greenhouse effect, and should we worry about it?
- Why is water such an important commodity?
- What's the role of wildfires in Southern California's ecosystems?

Like all sciences, geography is based on a system of rational inquiry and testing well-thought-out ideas (hypotheses). In this course, I will ask you to try the scientific process on your own – to interpret data and to test your own hypotheses.

After successfully completing this class, you can expect to:

- *Specify your exact location using latitude and longitude.*
- *Interpret features on a map in relation to real-world features.*
- *Compare the benefits and drawbacks of different types of maps and remotely sensed images.*
- *Choose the best map for a particular task.*
- *Identify, analyze and explain the landscapes you see from an airplane window.*
- *Interpret LANDSAT scenes and other common remote sensing images.*
- *Identify patterns of the earth's climate, landforms, bodies of water, and biomes.*
- *Relate natural landscape patterns to each other.*
- *Infer the climate, geological, hydrological, and biological processes that produce the landscapes you see.*
- *Describe examples of atmospheric, geological, hydrological and biological processes that produce features in the local landscape.*
- *Find the location of an unknown scene from landscape patterns and other natural clues.*
- *Compare relationships between humans and their natural environment.*

This class can also satisfies some of the physical science requirements for transfer patterns like IGETC or for your associate's degree.

ABOUT YOUR INSTRUCTOR

Although I am relatively new at City College, I have been teaching in the Earth sciences for a couple of years. I am a marine geologist by training, and have also taught classes in geology and oceanography at UCSD and Palomar College. I got my start as a kid with a rock collection, and then got hooked on the Earth sciences in college by a great introductory course. I'm excited about teaching this intro course in geography because this is probably my only chance to hook **YOU** on the beauty of Earth's landscapes and the power of Earth's dynamic systems – to get you excited about the world around you, and to unmask the natural world's inner workings and delicate balances. When you start looking at the Rockies out the window of an airplane on your way across the country, or when you start telling your hiking buddies about fire-adapted chaparral plants, I'll consider my work done!

Contact Information and Office Hours

Email: pselkin@sdccd.net (include "Geography 101 MW 8" in the subject heading)
Office: M-209
Office Phone: (619) 388-3643

You can always come and talk to me in M-209 during my office hours:

Monday 9:30-10:30 AM
and 4:00-5:00 PM
Tuesday 11:00-12:00 AM
Wednesday 9:30-10:30 AM
and 4:00-5:00 PM
Thursday 11:00-12:00 AM

If these hours are not convenient for you, we can make other arrangements. Outside of class, email is probably the best way to get in touch. I also have a voice mailbox if you prefer to get in touch by telephone. Email is better than voice mail because both you and I will have a record whenever you send me a message. I try to respond to email and voice mail as soon as possible, but I don't always have time to check email (I usually check it 1-2 times per day, at the beginning and end of each work day), and I don't guarantee that I'll check voice mail on weekends.

I hope to set up a class website which will include reading material, assignments, practice exams, a discussion forum, and links mentioned in class. I will discuss this further in class.

Reading Material

The following books and materials are **required**:

- *Physical Geography: A Landscape Appreciation* by McKnight and Hess (2004)
  I *recommend* the 8th edition – that's the edition I have and that's the edition that I base the reading and exams on – but the 7th edition is substantially the same, and might be less expensive. However, the 6th edition *is different and contains some mistakes*, which leads me *not* to recommend the 6th and earlier editions.
- In class, I may also assign *extra readings* from newspapers, journals or websites. I will hand out paper copies of this material in class, and there may be links to it on the class website. The LRC will also have copies of the readings on reserve.
- A set of colored pens or pencils to annotate maps and diagrams, and for writing on trade-and-grade exercises.
- Scantrons (#882) and a #2 pencil for (most) exam days.

The following materials are **optional but highly recommended**:

- *Hammond Comparative World Atlas* (2001) or – even better – another, more comprehensive atlas. You *will* need to use an atlas in this course, and we will have one on reserve, but it will be more convenient for you if you have one of your own.
- A protractor and a ruler. If you don't have these or if you don't know how to use them, ask me. I can lend you what you need and teach you how to use these tools of the trade.
- A calculator. This will be useful for figuring out your grade if for no other reason!
- Graph paper.

Please bring the McKnight and Hess textbook and the colored pencils/pens to class. **Especially the colored pens/pencils.** On exam days (see below) you will need the #2 pencil and scantron sheet.

Your Responsibilities, Class format and Grading

This class will consist of presentations, demonstrations and discussions, supplemented by some in-class exercises. It is important to come prepared to class, which means:

- Arriving at class on time.
- Bringing the required materials.

- Paying attention during class. [*NOTE: Cell phones are distracting:* please turn off your cell phones and pagers during class time!]
- Taking good notes in class. The learning styles website in Exercise 0 has some hints about note taking. Remember: *it is more important to listen, and to understand the concepts than to write down every single word I put in my presentation. But you should write/draw enough that you remember the ideas and have material to study for tests*.
- Turning in all of the assignments on time.
- Reviewing previous tests and, if you missed questions, figuring out why the answers were incorrect.
- Being ready to participate in discussions and group projects. Just being there does not constitute participation: you should be ready to answer questions and solve problems in class, to work with a team of colleagues, and to voice your opinion. *In my opinion, it's not as important to be "right" as to work out the answer to a question!*
- Being ready to get out of the classroom and look at the natural world on campus. Brief "field trips" might happen at any time, so bring a sweater if it's cold, and a jacket if it's rainy.
- Doing the assigned reading before class if possible. It will really help if you look up any unfamiliar terms from the reading (use your textbook's glossary or a dictionary).
- There are some skills that will make it easier for you to succeed in this class even though these skills are *not* prerequisites for the class. Exercise 0 will help you identify these skills.

I love to teach, and I want to see you get something lasting and worthwhile out of the course. However, that does not mean that I will guarantee you a grade of "A!" **Your effort** will be responsible for your own grade and for your progress in the course. Your grade will be based on the following:

7 tests at 25 points each (drop lowest score)	=175 pts. =-25 pts.	} 37.5% of total grade
4 out-of-class projects at 30 points each	=120 pts.	30%
13 in-class exercises at 5 points each 1 preliminary exercise at 5 points	=65 pts. =5 pts.	} 17. 5%
Final exam	=50 pts.	12.5%
Attendance and participation	=10 pts	2.5%
TOTAL	400 pts.	100%

Tests are 30 minutes long and will be **at the beginning of class on the day specified in the schedule** (so don't be late!). Most tests will consist of multiple-choice, matching, fill-in-the-blanks, and/or short-answer questions. The questions will be based **both on the reading and on material we have covered in class**, so be prepared! Your **lowest test score will be dropped** without it adversely affecting your grade (which may represent an absence). Therefore there will be ***no* make-up tests**. If you need special accommodations such as extra time or a quiet room, see me and I will help you make arrangements.

The out-of-class **projects** will be related to topics that we cover in class and in the reading. During the second week of class, you and a group of colleagues will choose a folder with material related to the projects. You may work on the project with your group, but you must turn in **your own work, in your own words**. Each of the 4 parts of the project has a due date, which is listed on the class schedule. You will be asked to turn these project parts in at the **end** of class. For parts 1-3, I will allow you to turn in **one** late assignment **if it is less than one week late**. The late assignment will receive (at most) **half credit if you turn it in within a week of the due date.** If an assignment is more than one week late, you will receive no credit on it. No credit will be given for more than one late assignment.

Most parts of the project will require that you use the World Wide Web. The computers in the Learning Resource Center and in the Cafeteria are available for your use on the web assignments, but you can use any computer that has Internet access.

Part 4 of the project will require you to use books and periodicals at the library as well. The library in the LRC is there for your perusal; San Diego's Public Library system is another good resource. Schools like SDSU and UCSD will also let you use their libraries (though you may not be able to take books out).

Pretty much every week, there will be a 5-point **exercise**. 5 points might not look like much, but they do add up. Most of these exercises will be corrected **in class,** and you will get the 5 points just for completing (and correcting) the exercise. That's **easy money**! However, there are no make-ups on in-class exercises (extra credit can help you if you miss these…). If you're reading this paragraph for the preliminary exercise, the answer to #6a is spelled out in underlined letters.

During the final class meeting, you will have a **final exam**. The final will be cumulative, meaning that you should expect to find questions on **any** of the topics covered in the course. However, **it will focus on topics from the last unit of the course** (landforms), and on the objectives listed in italics at the beginning of this syllabus. The final will be **50 questions long**, and we will have a class devoted to preparing for it. This is **not** included in the exam scores that can be dropped.

Your **participation and attendance** will also be a part of your grade. Even though this part of your grade is small, your attendance and participation in class can mean the difference between a B and an A.

During the course, there will also be chances for **extra credit**. These may include both in-class and out-of-class opportunities. These opportunities come without any prior warning: you'll need to be in class to know when there's the possibility for extra credit (I won't email you with extra credit questions if you miss them!). **I will not accept late extra credit assignments.** The extra credit opportunities are a **great** way to make up for missed in-class exercises. **You can earn at most 50 points (12.5% of your grade) from extra credit.**

Your grade, determined based on the factors I listed above, will be assigned on the following scale:

A	85% and up (340 pts.)
B	75% (300 pts.)
C	60% (240 pts)
D	50% (200 pts.)
F	under 50% (below 200 pts.)

Attendance Policy

It is important that you attend class consistently. If you are absent, I will make a note of it. If you are late to class and miss the roll call, it is your responsibility to speak to me **immediately after class** and to make sure I have you on the day's attendance list. Please talk to me if you have been absent: If you have a good reason, I may excuse your absence. This is especially true if you tell me **before** you are absent. I tend to work with students who keep me informed; otherwise, I'm not very forgiving about students missing important class meetings.

- See the section below on withdrawal for the possible penalties for dropping a course.
- If you miss the first class meeting, I will drop you from the roster. Make sure you speak to me **immediately** if you got there late! Otherwise your space will go to someone on the wait list. (I will take roll half an hour into the lecture to make sure latecomers don't get dropped by mistake)
- If you miss two exams and do not see me, I will drop your name from the roster.
- If you miss four class meetings without a good excuse, I will drop your name from the roster.
- If your name has been dropped for any of these reasons and you would like to add the class again, please come to me to discuss being reinstated. I would really like to give you the chance to stay in the class. However, it's very difficult to get back into the subject after you've missed more than four meetings: I will be less likely to reinstate you if that is the case. Also, it's your responsibility to submit the appropriate forms to the records office.

Adding or Dropping This Class

If you are adding this class, it is **your responsibility** to make sure your add is processed by **February 11th**.

February 11th is also the last day you can drop the class without a "W" on your record. If you need to withdraw later, you must make sure your drop is processed by **April 15th** (Tax Day!) to avoid having a letter grade put on your record. Anyone enrolled after April 15th will receive a letter grade.

Students with Disabilities

Students with disabilities who may need academic accommodations should discuss options with me during the first two weeks of class. Many possible services are available, including note-takers, specialized computer equipment, and extra time on exams.

Academic Honesty

The San Diego Community College District Catalog contains a code of conduct (pages 57-58), to which I expect you to adhere. One part of this code of conduct are definitions of cheating and plagiarism. The course catalog defines these dishonest practices as "the taking of and passing off as one's own the work or ideas of another" (District Policy 3100.3.1). More simply, this means stealing someone else's ideas, calculations, images or words and trying to turn them in as if they were yours. In this course, cheating and plagiarism will be dealt with very harshly. Consequences include:

- A grade of 0 for plagiarized work (exams and assignments)
- Reporting to the Dean
- Increased scrutiny of future work

The easiest way to avoid being caught plagiarizing or cheating is… DON'T DO IT in the first place! Here are some common examples of plagiarism, along with ways to avoid these pitfalls:

- *Copying text directly from an article or book, and pasting it, as is, into an essay you are writing. The copied words are not set apart from the rest of the text by quote marks ("") and a citation (some note that explains where the text came from).* Avoid this trap by summarizing the point you want to make **in your own words**. You should **still** cite the source where you found the idea.
- *Copying the test/exercise of a student next to you*. That student might not have the right answer! If you are having trouble on work we're doing in class, that is a signal that you should come talk to me – I can help with study strategies, sample questions, and other ways to help you become more independent.
- *Cheat sheets*. See above.
- *Turning in exactly the same work as your teammates on group projects*. Although you should be working as a group to figure out and discuss answers to the questions on the 4 group projects, the end result – the work you turn in – should represent **your own effort**. Your team is your "support network:" the people you bounce ideas off of, and the people you sit down with to puzzle things out (they are also relying on **you**, which is another aspect of group work you should consider). Take good notes when you meet with your teammates, and at the end of your meetings, go home or go back to your seat and think about the assignment on your own. Evaluate everyone's ideas, including your own. Come up with your own way of expressing the answers to the questions, and write the answers down **in your own words**. When you turn in group work, include the names of your teammates under the "With Help From:" heading at the top of the assignment sheet. [NOTE: this does not apply to the in-class *extra credit* team activities we may have from time to time. In these, I'll ask each team a question, and you will have to come to an agreement on an answer.]

CLASS OUTLINE

This outline is subject to change during the semester. All pages below are in McKnight & Hess, 8th edition.

Week	Class Mtg.	Topic / Assignments	Reading
1	*1/31*	Introduction to this course	This syllabus
	2/2	Introduction to the Earth CHOOSE GROUPS FOR PROJECTS	Chapter 1 (pp. 1-8)
2	*2/7*	**Unit I: Maps and Navigation** Positioning yourself	pp. 9-27, 43-44
	2/9	Making and using maps	Chapter 2 (31-40)
Reminder: February 11th is the Add/Drop Deadline			
3	*2/14*	Topographic maps	41-43, Handout
	2/16	Remote sensing and satellites TEST 1: MAPS AND NAVIGATION (2/7-2/14)	44-52, Handout
4	**2/21 is Presidents' Day: No Class! Woo Hoo!**		
	2/23	**Unit II: Weather and Climate** Introduction to Climate/Meteorology PROJECT PART 1 DUE	Chapter 3 (55-66)
5	*2/28*	Temperature and the Sun	Chapter 4 (71-98)
	3/2	Wind	Chapter 5 (101-129)
6	*3/7*	Atmospheric Moisture TEST 2: CLIMATE PART I (2/23-3/2)	Chapter 6 (131-149)
	3/9	Atmospheric Moisture part II	(149-159)
7	*3/14*	How to be a Weatherman	Chapter 7 (163-197)
	3/16	Climate Patterns	Chapter 8 (199-238)
Week of 2/21: Spring Break! Another vacation! Right on!			
8	*3/28*	Global Warming and Ice Ages PROJECT PART 2 DUE	pp. 82-85, 511-516, 536-539 or handout
	3/30	**Unit III: The Hydrosphere** Introduction to Hydrology TEST 4: CLIMATE PART II (3/9-3/28)	Chapter 9 (241-259)
9	*4/4*	Bodies of Water	
	4/6	Water Use and Drought	Handout
10	*4/11*	**Unit IV: The Biosphere** Introduction to Ecology TEST 5: HYDROSPHERE (3/30-4/6)	Chapter 10 (263-279)
	4/13	Evolution and Adaptation	Chapter 11 (281-301)
Reminder: April 15th is the Withdrawal Deadline (and tax day…)			

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11	*4/18*	Biomes and Ecosystems PROJECT PART 3 DUE	(301-321)
	4/20	**Unit V: The Deep Lithosphere** Introduction to Geology TEST 6: BIOSPHERE (4/11-4/18)	Handout
12	*4/25*	Rock cycle and rock types PROJECT PART 4 *OUTLINE* DUE	Chapter 13 (359-368)
	4/27	Rocks and dirt	Chapter 12 (325-344)
13	*5/2*	Plate tectonics	Handout
	5/4	**Unit VI: Landforms** **Landforms produced by tectonics** TEST 7: DEEP LITHOSPHERE (4/20-5/2)	Chapter 14 (393-423)
14	*5/9*	Danger: Falling Rocks	Chapter 15 (425-441)
	5/11	Rivers	Chapter 16 (445-470)
15	*5/16*	Coasts	Chapter 21 (541-558)
	5/18	Glaciers PROJECT PART 4 DUE	Chapter 19 (511-539)
16	*5/23*	**Review**	Review everything
	5/25	**Final**	

Teammates' Names and Contact Information for Group Projects

1. Name:

   Phone Number:

   Email:

2. Name:

   Phone Number:

   Email:

3. Name:

   Phone Number:

   Email:

4. Name:

   Phone Number:

   Email:

5. Name:

   Phone Number:

   Email:

6. Name:

   Phone Number:

   Email: