

Discover Geography – Fall 2009

32-100-02: 2:00-2:50 p.m. Monday, Wednesday, and Friday, McKay Education Bldg 010

32-100-03: 2:00-2:50 p.m. Monday, Wednesday, and Friday, McKay Education Bldg 010

32-100-04: 3:00-3:50 p.m. Monday, Wednesday, and Friday, Advanced Tech and Sci Hall 152

Prof. Stentor Danielson

Office: Advanced Technology and Science Hall, Room 327 (enter through the Geography main office, Room 319, and go straight back then take a right)

Phone: x2564

Email: stentor.danielson@sru.edu

Office hours: Official office hours are Monday 12:30-1:30 pm, Thursday 10-noon, and Friday 10-noon. My door is generally always open when I am in the office, and I welcome students anytime I'm in.

Classmate to contact for missed classes:

Name: _____ Email: _____ Phone: _____

About this class

This class will introduce you to the discipline of geography. It is intended as an overview of geography's diverse interests and an exploration of some interesting problems being investigated by geographers today for freshman and sophomore students who have had little exposure to the field beyond memorizing state capitals and *National Geographic* magazine.

By the end of this class, you should be able to:

- Identify what geographers do, what the major problems investigated by geographers are, and what tools geographers use to find answers
- Read and evaluate maps of the Earth with respect to scale, projection, content, and symbology
- Identify basic GIS functions and their social relevance
- Apply the major theories of physical geography to understanding the natural landscape, including plate tectonics, erosional landforms, basic weather processes, the distribution of climates, the distribution of biota, major bio-geo-chemical cycles, succession and resilience of ecosystems, and the role of fire
- Explain the distribution of people across the Earth on the basis of population and migration factors
- Analyze the way political and economic processes have shaped differences between parts of the world
- Understand the role of human diversity with respect to gender, sexuality, race, and ethnicity in shaping places and people's experiences
- Explain the processes by which humans modify the natural environment (particularly climate change and agriculture), and the ramifications of those changes for human societies
- Identify inequalities among human groups in access to and impacts from their environments
- Evaluate ways that humans interact with their environment

This course addresses the following departmental outcomes:

- Each graduate shall develop the ability to respect and integrate diverse worldviews in problem-solving frameworks. (1.5)
- Each graduate will deliver oral presentations, demonstrating the ability to effectively communicate discipline-specific concepts. (1.1)
- Each graduate will write scholarly papers using acceptable format and organization with proper citations to appropriate literature. (1.2)
- Each graduate will demonstrate professionalism and integrity in his/her academic conduct. (1.4)
- Each graduate will demonstrate the ability to develop valid research questions and hypotheses. (2.1)
- Each graduate will demonstrate the ability to apply proper techniques for data acquisition and interpretation in a problem-solving context. (2.2)
- Each graduate will demonstrate the ability to solve open-ended problems using scientific methodology. (2.3)
- Each graduate will develop the ability to make informed, scientifically-based decisions regarding environmental issues. (2.4)
- Each graduate will learn to read, construct, and comprehend thematic maps and derive perspective output from a map. (3.2)
- Each graduate will demonstrate the ability to apply knowledge, concepts and techniques from complementary disciplines to solve problems (3.3)
- Each graduate will demonstrate an understanding of physical features and patterns of the physical environment (4.1)
- Each graduate will demonstrate an understanding of features and patterns of the human environment. (4.2)
- Each graduate will demonstrate an understanding of concepts such as absolute and relative location, proximity, separation, direction, region, hierarchy, density, and dispersion, and methods that are used to describe and analyze spatial patterns. (4.3)
- Each graduate will demonstrate an understanding of absolute location systems such as latitude-longitude and alpha-numeric grids. (4.4)
- Each graduate will demonstrate an understanding of major spatial features and patterns in the natural environment such as those relating to climate, oceans, soils, landforms, and vegetation. (4.5)
- Each graduate will demonstrate an understanding of the major processes, such as evolution, atmospheric circulation, weathering and erosion, ocean currents, plate tectonics, and volcanism that shape patterns in the natural environment. (4.6)
- Each graduate will demonstrate an understanding of the major spatial features and patterns in the cultural environment such as language, religion, and agriculture and economic, political, and demographic regions. (4.7)
- Each graduate will demonstrate an understanding of the major processes such as settlement, migration, trade, technological development, diffusion, and landscape transformation that shape cultural patterns. (4.8)

And the following university-wide outcomes:

- Communication: Communicate effectively in speech and in writing, using appropriate information sources, presentation formats, and technologies. (1)
- Critical Thinking and Problem Solving: Locate, analyze, synthesize, and evaluate information and ideas from multiple perspectives--mathematical, scientific, and humanistic. Apply this

- information literacy to contemporary challenges. (2)
- Values and Ethics: Demonstrate an understanding of how the values of personal integrity, cooperative action, and respect for diversity influence one's own behavior and the individual and group behavior of others. (3)
 - Social Awareness and Civic Responsibility: Use knowledge of evolving human institutions and of diverse cultural and historical perspectives to interact effectively in a variety of social and political contexts. (4)
 - Global Interdependence: Act with an understanding of the cultural, socio-economic, and biological interdependence of planetary life. (5)
 - Personal Development: Demonstrate intellectual curiosity, as well as a commitment to wellness, and to emotional and spiritual growth. (6)
 - Professional Proficiency: Apply knowledge and skills to meet professional competencies within a specific discipline. (8)

Assignments

This class is divided into five units: a short introductory one, and four units covering the four major sub-fields of geography: Mapping Sciences, Physical Geography, Human Geography, and Human-Environment Geography. Each of the four sub-field units will have three assignments: an individual homework exercise, a group investigation, and a short test. In addition to these sub-field assignments, you will complete daily reading quizzes and take a final exam.

1. Individual homeworks

At the beginning of each unit, I will hand out a homework exercise. This exercise will typically require using websites or library materials beyond what we use in class to find more information. Homeworks must be handed in at the beginning of the “group presentation” class for that unit. Your grade will be reduced by 1 point out of 25 for each 24 hour period or part thereof a homework is late. I prefer homeworks to be handed in in paper format. A homework submitted electronically will not count as handed in until I am able to successfully open the file (that is, delays due to corrupted or accidentally-not-attached files count against your grade).

2. Group investigations

I will assign each person in the class to a group of 3-5 students (I will inform you through email what group you are in). Each group will be randomly assigned to do an investigation for *one* of the four sub-field units. You will be asked to investigate a particular problem and devise a solution to be presented to the class. Specific instructions will be handed out at the beginning of each unit. Each group will be graded on its in-class presentation and accompanying written materials (the same guidelines for paper and electronic submission mentioned for homeworks apply here).

Each group member must also hand in a short summary (approximately a third of a page) of what work each member did. Generally speaking, I will give the same grade to all group members, but if the work summaries indicate a serious discrepancy in contributions from different members, I may adjust the grades. Groups that are not ready to present on the assigned day may postpone their presentation, at a penalty of 3 points out of 30 (10% of the total possible score) for each class day the presentation is pushed back.

3. Tests

Each sub-field unit will end with a test covering the key facts and theories of the unit. Tests will be multiple-choice, with no penalty for a wrong guess. Make-up tests will generally only be given for documented, unforeseeable emergencies. Tests will typically not last the entire class period, though you will have the entire class period to work on them if you need it.

4. Reading quizzes

Beginning with the Sept. 4 class, there will be a short (1-2 questions) reading quiz for each non-test-day class period posted to Blackboard. You will need to log on to Blackboard and complete the quiz there before the beginning of class. This is to ensure that everyone has done the reading. Since you can look at the reading while doing the quiz, this should be an easy 10% of your grade.

Your four lowest quiz grades will be dropped at the end of the semester, meaning you get four free days off. However, you are still responsible for knowing the material from that day's class, so be sure to get the notes from a friend and do the readings.

5. Final exam

The final exam will last a full hour, and cover material from the entire semester. The format will be similar to the sub-field unit tests.

Grading

The final grade for this class will consist of:

Homeworks	100 pts (25 pts each)	33.3% (8.3% each)
Group investigation	30 pts	10%
Subfield tests	80 pts (20 pts each)	26.6% (6.6% each)
Reading quizzes	30 pts (1 pt each)	10%
Final exam	60 pts	20%
<i>Total</i>	<i>300 pts</i>	<i>100%</i>

No extra credit whatsoever will be offered in this class, so don't ask.

Your grade in this class is meant to be a measurement of how well you understand the course material. It is not a measure of your effort, or your worth as a person, or what grade you “need.” I encourage you to share concerns about your grades with me. However, any arguments about changing a grade must show why your original grade poorly reflects your actual understanding of the material. I do not use curves when grading. I would be thrilled if everyone earned an A in the class, but I do intend to make the work challenging. Remember that a “C” is intended to be an “average” grade, representing a medium level of understanding of all of the material that we will cover.

The final grade for the class will use the traditional grading scale:

100%-90%	A
89%-80%	B
79%-70%	C
69%-55%	D
54% and less	F

Attendance and Preparation

Instead of asking you to buy an expensive textbook, I have elected to give you a selection of readings from the Internet and articles posted to the library's Electronic Reserve system. These readings are meant to prime you for our work in class, not to comprehensively cover everything that I will want you to learn. I expect every student to have read the readings listed for a given day before coming to class.

Tests will be based on material presented in class. Unless I explicitly say otherwise, you should assume that anything that I say in class is fair game for the test. I will use the time following the group presentations on each unit to do some review for the test – but just because something didn't come up during the review doesn't mean I won't put it on the test. The list of key ideas for each day can be a helpful guide to focusing on the most important aspects of each day's lesson.

Discussions, small group work, and Socratic (question and answer) methods will be used in this class. Participation in these activities is necessary for learning, and I believe that every student who is genuinely engaged with the material will have something to contribute. At the same time, the class must be a safe place for everyone to speak out. Comments or behavior that devalue or disparage your classmates or other members of society will absolutely not be tolerated, but every substantive geographical idea will be open to evaluation and critique.

You are expected to take effective notes during all class activities. Because of the dynamic nature of the class, I cannot provide notes to students who miss class, so as soon as possible you should find a friend or two in the class to share notes with. I will place all of my PowerPoint presentations (which consist mostly of images and maps) on Blackboard for your reference.

I assume that all members of this class are adults who have chosen to take this class because you are interested in learning about geography. Therefore, behavior that is disruptive to your own learning or that of others will not be tolerated, and you will be asked to leave. Such behavior includes: eating, smoking, sleeping, working on work for other classes or personal business, talking about topics other than geography, and the use of non-approved electronic devices (iPods, laptops, cell phones, etc. – all cell phones must be *turned off* when you enter the class and remain off until you leave).

Special Needs

Your ability to master the class material should not be hindered by anything other than your own effort. If you have a disability, health issue, outside responsibility, or other concern that may affect your ability to succeed in this class, do not hesitate to contact me or the university's Office for Students with Disabilities (738-4877, linda.quidone@sru.edu, 122 Bailey Library), and we will work together to find an accommodation for you.

E-Reserves and Blackboard

I will use the library's Electronic Reserve system (<http://doculib.sru.edu/eres/default.aspx>) to distribute readings, and the Blackboard site (<http://blackboard.sru.edu>) to post assignments, administer quizzes, and send messages about the class. You should make sure that you are able to access the Electronic Reserves and to log in to the class's Blackboard site. It is your responsibility to contact the IT office (1-866-766-5962) or library (724-738-2641) if you have a problem. You are also responsible for checking your sru.edu email account daily, as I will be sending class emails through Blackboard to those addresses.

Academic Honesty

Cheating (any method for getting the correct answers other than knowing the material yourself) and plagiarism (representing others' work as your own) will not be tolerated, and I will be alert for signs of both. In your homework and group investigations, any idea that you take from any person other than yourself must be properly cited, and any words or phrases that you take from others must be clearly marked as quotations. You may discuss ideas with your classmates, or get help proofreading, but all of the writing must be your own. On the first instance of cheating or plagiarism, you will receive a zero for that assignment. On the second instance, you will receive a zero for the course. Review the section in your Student Handbook on Academic Honesty for a more detailed explanation of the university's procedures for handling cheating and plagiarism.

Changes

While I do not expect much to change about this syllabus, I reserve the right to make changes and will notify students of them in class, through Blackboard, and/or by email.

Schedule of Topics and Readings

	<i>Date</i>	<i>Unit</i>	<i>Topic</i>	<i>Reading</i>
M	Aug 31	1	First day	-
W	Sept 2	1	Geographical questions Key ideas: Geography as the as Why of Where, space, place, region, four sub-fields (mapping sciences, physical, human, human-environment).	1) Charles F. Gritzner 2002 “What Is Where, Why There, and Why Care?,” http://tinyurl.com/ku6unp 2) Go to the online table of contents of the <i>Annals of the Association of American Geographers</i> , http://tinyurl.com/nhzc2z , and read over the titles and abstracts of the articles from several recent issues.
F	Sept 4	2	Maps: Map basics Key ideas: Maps as simplifications of the surface of the earth serving some purpose, scale, choice of what to display, reading topographic/isoline and choropleth maps	Wikipedia “Cartography” http://tinyurl.com/ljn98
M	Sept 7		<i>No Class – Labor Day</i>	-
W	Sept 9	2	Maps: Projections Key points: Shape of the Earth, latitude and longitude, equal-area vs equal-angle vs equal-distance, Mercator vs Gall-Peters controversy, main projections (Mercator, Gnomonic, Gall-Peters, Sinusoidal, Mollweide, Goode's Interrupted Homolosine, Robinson, Azimuthal, Conic)	Carlos A. Furuti 2008 “Map Projections” http://tinyurl.com/kopj6o (Start at the beginning and read until you get to the “Distortion Pattern” page. Click through the rest of the site to see some interesting examples of projections.)

F	Sept 11	2	Maps: Finding and using data Key ideas: Data requirements (accuracy, relevance, compatibility), vector vs. raster data, surveying, GPS, remote sensing, metadata	Harrison and Jupp n.d. "Introduction to Remotely Sensed Data" http://tinyurl.com/q8h2oh
M	Sept 14	2	Maps: GIS Key ideas: What is GIS, layer model, basic GIS operations (location, data exploration, wayfinding, overlays, site location, modeling)	Wikipedia, "Geographic Information System" http://tinyurl.com/6h855
W	Sept 16	2	Maps: How to lie with maps Key ideas: Maps as inevitably value-laden, possibility of manipulation, recognizing maps' intentions	Mark Monmonier 1991 <i>How to Lie With Maps</i> , Chapter 3 [E-Reserve]
F	Sept 18	2	Maps: PGIS Key ideas: What is participatory GIS, how GIS can marginalize citizens, is participatory GIS really empowering?	Timothy Hawthorne 2005 "Participatory GIS for Growth Management in the Cheat Lake Planning District of Monongalia County, West Virginia" http://tinyurl.com/oyarr5
M	Sept 21	2	Maps: Group presentations	-
W	Sept 23	2	Maps test	-
F	Sept 25	-	<i>No class – Department Retreat</i>	-
M	Sept 28	3	Physical: Plate tectonics Key ideas: Internal structure of the earth, plate tectonics, types of plate boundaries, types of volcanoes	Michael Pidwirny 2008 <i>Fundamentals</i> , chapter 10, parts h, i, and n. http://tinyurl.com/nfobpv
W	Sept 30	3	Physical: Landforms Key ideas: Folding and faulting, synclines and anticlines, horsts and grabens, watersheds, meanders, glaciers, moraine, drumlins, kettles	Michael Pidwirny 2008 <i>Fundamentals</i> , chapter 10, parts l, y, z, ad, ae, and af. http://tinyurl.com/nfobpv
F	Oct 02	3	Physical: Weather Key ideas: Weather vs. climate, humidity, adiabatic heating and cooling, clouds and precipitation, air masses, fronts, mid-latitude cyclones	Michael Pidwirny 2008 <i>Fundamentals</i> , chapter 7 parts n, r, s, and t. http://tinyurl.com/lhdaj6

M	Oct 05	3	Physical: Climate Key ideas: Seasons, greenhouse effect, Coriolis effect, main determinants of climate and their operation (latitude, primary circulation, ocean currents, land vs. water, topographic barriers, altitude, seasonal changes)	Michael Pidwirny 2008 <i>Fundamentals</i> , chapter 7 parts m and p. http://tinyurl.com/lhdaj6
W	Oct 07	3	Physical: Biogeography Key ideas: Energy cycles and food web, carbon cycle, nitrogen cycle, ecosystems and biomes, influence of climate, influence of continental drift, influence of oceans, influence of humans	Michael Pidwirny 2008 <i>Fundamentals</i> , chapter 9 parts d, e, f, j, k, r, and s. http://tinyurl.com/l84gxt
F	Oct 09	3	Physical: Fire Ecology Key ideas: Plant and animal adaptations to fire, Mutch hypothesis, fire regimes, Minnich-Keely debate	Pyne, Andrews, and Laven 1996 <i>Introduction to Wildland Fire</i> , Chapter 5, sections 5.1-5.3. (pages 177-209 – you can skip section 5.4) [E-Reserve]
M	Oct 12	-	<i>No Class – Fall Break</i>	-
W	Oct 14	3	Physical: Resilience Key ideas: Succession, adaptive cycle, resilience, threshold effects	C.S. Holling 2001 “Understanding the Complexity of Economic, Ecological and Social Systems” <i>Ecosystems</i> 4: 390-405 [E-Reserve]
F	Oct 16	3	Physical: Group presentations	-
M	Oct 19	3	Physical test	-
w	Oct 21	4	Human: Population Key ideas: Population equation, Malthus and critiques, food entitlements, demographic transition, population control policies	Amartya Sen 1994 “Population: Delusion and Reality” <i>Asian Affairs</i> http://tinyurl.com/mzjrsk
F	Oct 23	4	Human: Migration Key ideas: Push and pull factors, who migrates, remittances, chain migration, types of status	Richard Boudreaux 2006 “The Seeds of Promise,” <i>Los Angeles Times</i> http://tinyurl.com/qjwlx
M	Oct 26	4	Human: Development Key ideas: What is development, GDP, 1 st World/North/developed vs 3 rd World/South/developing, how development is promoted, critique of development	1) Komala Ramachandra 2006. Sardar Sarovar: An experience retained? <i>Harvard Human Rights Journal</i> 19: 275-281. http://tinyurl.com/lhdc5v 2) List of U.N. Millennium Development Goals http://tinyurl.com/o688jt

W	Oct 28	4	Human: Medical Key ideas: Basic reproductive ratio, importance of large dense population and herd animals, epidemics caused by colonialism, epidemiological transition	Andrew Dobson and Robin Carper 1994 “Infectious Diseases and Human Population History,” <i>BioScience</i> 46: 115-126 [E-Reserve]
F	Oct 30	4	Human: Colonialism Key ideas: Theories of the rise of the West, world systems theory, role of colonization of Americas in current development levels	James Blaut 1976 “Where Was Capitalism Born?” <i>Antipode</i> 8: 1-11 [E-Reserve]
M	Nov 02	4	Human: Race and ethnicity Key ideas: Race as social not biological, social science perspective on racism, what is ethnicity, ethnocentrism, cultural relativism	1) Jonathan Marks 2006 “The Realities of Races,” Social Science Research Council, http://tinyurl.com/mcbphf 2) Charla Bear 2008 “American Indian Boarding Schools Haunt Many,” <i>NPR</i> http://tinyurl.com/deyoyf
W	Nov 04	4	Human: Gender and sexuality Key ideas: Sex vs gender expression vs gender identity, trans vs cis, gendering of places, differences between places in gender norms	Mae Proudley 2008. “Fire, families, and decisions” <i>Australian Journal of Emergency Management</i> 23(1): 37-43 http://tinyurl.com/mzvhyd
F	Nov 06	4	Human: Cities Key ideas: Urbanization, residential segregation, white flight, gentrification, sprawl, car-oriented vs transit-oriented growth	1) Noel C. Paul 2004 “From Urban Blight to Community Revival,” <i>Christian Science Monitor</i> http://tinyurl.com/muxned 2) Coral Davenport 2006 “In a Fast-Growing County, Sprawl Teaches Hard Lessons,” <i>Christian Science Monitor</i> http://tinyurl.com/mv49qa
M	Nov 09	4	Human: Political Key ideas: Territorial sovereignty, spread of modern state, reasons for districting	Wikipedia “Gerrymandering” http://tinyurl.com/3mjnb
W	Nov 11	4	Human: Group presentations	-
F	Nov 13	5	Human test	-
M	Nov 16	5	Environment: Climate change Key ideas: Greenhouse effect, evidence for change, role of fossil fuels, role of land cover change, effects of warming, mitigation vs. adaptation	Intergovernmental Panel on Climate Change 2008 Fourth Assessment Report, “Summary for Policymakers,” http://tinyurl.com/2b6q2m

W	Nov 18	5	Environment: Risks and vulnerability Key ideas: Definitions of risk and vulnerability, causes of vulnerability	Yohe, Malone, Brenkert, Schlesinger, Meij, and Xing 2006 “Global Distributions of Vulnerability to Climate Change” <i>Integrated Assessment Journal</i> 6(3): 35-44. http://tinyurl.com/nf6d85
F	Nov 20	5	Environment: Adaptation Key ideas: Environmental determinism vs. backdrop, types of adaptation, adaptation in whose interest	Alexandra Slack 2002 “Why did Norse Greenland Fail as a Colony?” <i>Yale Medieval Yearbook</i> http://tinyurl.com/ntoe69
M	Nov 23	5	Environment: Environmental justice Key ideas: Substantive vs. procedural justice, intention vs. effect, geography of disparate impacts	Bullard, Mohai, Saha, and Wright 2007 <i>Toxic Wastes and Race at Twenty</i> , Executive Summary http://tinyurl.com/kqpdhy
W	Nov 25		<i>No Class – Thanksgiving</i>	-
F	Nov 27		<i>No Class – Thanksgiving</i>	-
M	Nov 30	5	Environment: Management Key ideas: Hands-on versus hands-off management, tragedy of the commons and responses, community involvement	Ostrom, Burger, Field, Norgaard, and Policansky 1999 “Revisiting the Commons” <i>Science</i> 284: 278-282. [E-Reserve]
W	Dec 02	5	Environment: Agriculture Key ideas: Intensification, pros and cons of taking up agriculture, pros and cons of the Green Revolution	Jared Diamond 1987 “The Worst Mistake in the History of the Human Race” <i>Discover</i> May: 64-66. http://tinyurl.com/yvkkfu
F	Dec 04	5	Environment: Resources Key ideas: Resources vs. sinks vs. services, resources are relative, IPAT, ecological footprint, sustainability, substitutability	Smith and Gullo 2008 “Texaco Toxic Past Haunts Chevron as Judgment Looms” <i>Bloomberg</i> http://tinyurl.com/ntvt2k
M	Dec 07	5	Environment: Perception Key ideas: Perception as active process, objectivism vs. relativism vs. pragmatism	Douglas, Thompson and Verweij 2003 “Is Time Running Out?” <i>Daedalus</i> 132: 98-107 [E-Reserve]
W	Dec 09		Environment: Group presentations	-
F	Dec 11		Environment test	-
M	Dec 14		Review for final	-
W	Dec 16		Final Exam for 32-100-02 and 03	3:30-5:30 p.m.
F	Dec 18		Final Exam for 32-100-04	1:00-3:00 p.m.

Behavioral Contract

Professor's expectations:

In order to achieve the outcomes of the course in a manner fair to all students, I expect each member of the class to do the following:

- Arrive at class on time, prepared to participate in all class activities including lectures, discussions, individual exercises, group work, and other activities designed to promote learning
- Complete all assignments in a timely and professional manner, in accordance with the assignment instructions
- Adhere to all specific expectations outlined in the course syllabus and all amendments and elaborations posted through email or on Blackboard. It is the student's responsibility to ensure that they are able to access SRU email and Blackboard, and to check them daily
- Treat your classmates, the instructor, and other members of society in a respectful manner. Disruptive, disrespectful, or unsafe behavior is absolutely not permitted
- Ask questions in class and seek additional help through email, office hours, or other appointments as needed to ensure your understanding the class material
- Adhere to the SRU Student Code of Conduct

Depending on the nature of the violation, I reserve the right to:

- Ask the student to leave the classroom
- Deduct points from the student's grade
- Refer the student's behavior to the chair of the department, dean, university police, or other appropriate authorities

Student's acknowledgement:

I acknowledge that I have received a copy of the course syllabus. I have been informed of the academic and behavioral expectations for this class and the consequences of violating them, and have had the opportunity to receive oral clarification of them. I agree to abide by all of the class expectations and the SRU Student Code of Conduct.

_____ Name (please print neatly)

_____ Signature

_____ Date