## M-W 11:30 AM – 12:45 PM, CBC A110

Faculty:	Dr. Jeremy Koonce 207 LFG 895-1092 Email: <u>jeremy.koonce@unlv.edu</u>	
Office Hours:	Tues. 1:30–2:30 PM, Thurs. 10:00–11:00 AM, and by appointment	
Course Format:	Lecture twice a week	
Required Textbook:	Geosystems, R.W. Christopherson and G.H. Birkeland, 10 <sup>th</sup> Edition	
Prerequisites:	No university prerequisites	

### Learning Outcomes:

This course will further your understanding of the Earth systems that operate all around you, and will inspire you to learn more about how our society interacts with, is dependent upon and affects these systems. Upon completion of this course, students will be able to:

- Summarize the concept of systems science, articulating components including open and closed systems, equilibrium and feedbacks, and be able to provide basic everyday examples of each
- Demonstrate the principles of mapping including scale, projection and a critical awareness of map generalization and distortion
- Explain the basic formation of the solar system and Earth-Sun relationships and it controlling effect on the energy budget of the Earth
- Explain the interactions of energy and moisture within the atmosphere that results in the formation of weather systems, as well as interpret basic weather symbols and common weather patterns displayed in a typical weather report
- Define the concept of climate and demonstrate an up-to-date knowledge of anthropogenic climate change to the level of being able to critically evaluate new information on this often controversial topic
- Identify the major aspects of Earth's internal structure and plate tectonic theory, articulating the connections to earthtransforming processes including earthquakes and volcanic eruptions
- Explain the hydrologic cycle, groundwater system and the process of erosion, and evaluate the influence people are having on the function of these systems through our diversion, manipulation and use of water
- Demonstrate mastery of surficial geomorphic processes including mass wasting, fluvial, aeolian, and glacial processes by correctly identifying typical landforms and explaining the basic mechanical processes that results in their formation and change over time
- Demonstrate the ability to synthesize these learning outcomes in crafting essay responses to real-world scenarios requiring critical analysis of the physical environment, its processes and trends as part of the comprehensive final exam

Grading policy: Final grades will be assigned according to the following schedule. The instructor may also elect to curve the final grades in the students favor.

Grade	Semester average	Grade	Semester average
Α	over 93	С	between 73 and 77
A-	between 90 and 93	C-	between 70 and 73
B+	between 87 and 90	D+	between 67 and 70
В	between 83 and 87	D	between 63 and 67
B-	between 80 and 83	D-	between 60 and 63
C+	between 77 and 80	F	less than 60
nal Gra	des will be computed as follo	ws:	
Three lecture exams (20% each)			60%
	· · · · · `		000/

### Fi

Three lecture exams (20% each)	60%
Comprehensive final exam	30%
Lecture quizzes/assignments	10%
	100%

### Notes:

1. No extra credit will be given.

2. No make-up exams, make-up quizzes, or make-up exercises will be given unless you provide a written medical, military, or university excuse. So plan to attend class.

# M-W 11:30 AM - 12:45 PM, CBC A110

Date	Lecture Topic	Required Reading		
Week 1				
Jan. 21	No Class: Martin Luther King Jr. Day Recess			
Jan. 23	Intro/Essentials of Geography/Solar Energy to Earth and the Seasons	Chapter 1 / 2		
Week 2				
Jan. 28	Earth's Atmosphere	Chapter 3		
Jan. 30	Atmospheric Energy and Global Temperatures	Chapter 4		
Week 3				
Feb. 4	Atmospheric Energy and Global Temperatures	Chapter 4		
Feb. 6	Atmospheric and Oceanic Circulations	Chapter 5		
Week 4				
Feb. 11	Exam 1 (Chapters 1-5)			
Feb. 13	Water and Atmospheric Moisture	C <mark>ha</mark> pter 6		
Week 5				
Feb. 18	No Class: Washington's Birthday Recess			
Feb. 20	Weather	Cha <mark>pte</mark> r 7		
Week 6				
Feb. 25	Video: Tornadoes			
Feb. 27	Water Resources	Chapter 8		
Week 7				
Mar. 4	Water Resources	Chapter 8		
Mar. 6	Earth's Climatic Regions	Chapter 9		
Week 8				
Mar. 11	Climate Change	Chapter 10		
Mar. 13	Exam 2 (Chapters 6-10)			
Spring Break March 18-24				
1 1 1 1 - 0	Man OO Final Data ta Analit / M/Halanan			

Week 9 Mar. 29 Final Date to Audit / Withdraw		
Mar. 25	The Dynamic Planet	Chapter 11
Mar. 27	The Dynamic Planet / Tectonics, Earthquakes, and Volcanism	Chapter 11 / 12
Week 10		
Apr. 1	Tectonics, Earthquakes, and Volcanism	Chapter 12
Apr. 3	Weathering, Karst Landscapes, and Mass Movement	Chapter 13
Week 11		
Apr. 8	River Systems	Chapter 14
Apr. 10	Eolian Processes and Arid Landscapes	Chapter 15
Week 12		
Apr. 15	Exam 3 (Chapters 11-15)	
Apr. 17	Video: Chasing Ice	
Week 13		
Apr. 22	Glacial Landscapes and the Cryosphere	Chapter 17
Apr. 24	The Geography of Soils	Chapter 18
Week 14		
Apr. 29	Ecosystem Essentials	Chapter 19
May 1	Ecosystem Essentials	Chapter 19
Week 15		
May 6	Video: Lord of the Ants	
May 8	Review	
Week 16 Final Exam Wednesday, May 15 at 10:10 AM – 12:10 PM		

**Changes to Syllabus:** The above lecture schedule is tentative; adjustments to the schedule of topics and reading assignments may be made in accordance with the rate of progress in the classroom. The instructor also reserves the right to change a lecture topic to reflect world events. Students will be provided with an updated syllabus if significant changes are necessary.

## GEOG 103 – Physical Geography of Earth's Environment, Sec 1001, Spring 2019

### M-W 11:30 AM - 12:45 PM, CBC A110

### **UNLV Academic Policies**

Students taking this course are required to be familiar with the UNLV academic polices at the URL shown below.

Please see this link for select, useful information for students: https://www.unlv.edu/sites/default/files/page\_files/27/SyllabiContent-MinimumCriteria-2018-2019.pdf

#### **GEOG 103 Policies**

**1. Participation -** If you are confused about any of the material presented, please ask questions in class for clarification and further explanation. You will not be alone in your confusion. There are many ways to present this material, and I will attempt to find one that works for you. If you do not feel comfortable asking questions in class, please contact your lab instructor or myself.

**2. Attendance -** It is important that you attend class daily because we cover a lot of material, and I will regularly provide guidance regarding reading assignments and exams. You are responsible for all material covered in lecture no matter what causes your absence. If you miss a lecture, get the notes from a classmate. Topics covered may vary from the schedule somewhat, but the exam dates will remain fixed.

**3. Missed work -** Exams, quizzes, and assignments, missed due to absence will receive a grade of zero unless you provide notification of an exception for a religious holiday or university-sponsored extracurricular activity as specified in the University Catalog. In the case of an excused absence, the nature and format of the make-up exam will be at the instructors' discretion.

**4. Administrative Drops/Classroom Conduct** - You are required to be familiar with university policies and procedures in the current UNLV Undergraduate Catalog. Importantly, we follow the policies on Administrative Drops/Classroom Conduct as stated in the most recent UNLV Undergraduate Catalog. Any student that does not comply with these requirements, and conducts themselves in a manner that is disruptive and interferes with the right of other students to learn, or of the instructor to teach will be administratively dropped from the course.

5. Non-enrolled guests - Students are not allowed to bring guests, including children to either lecture or laboratory.

**6. Academic Misconduct** - This course operates under a "zero tolerance" policy. Any student who commits cheating or plagiarism will receive a grade of F for the class.