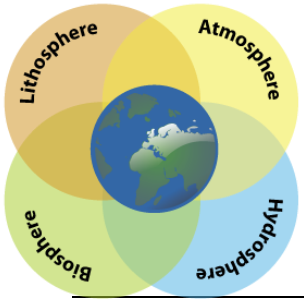

GEOG 111x – Earth and Environment: Elements of Physical Geography (4 credits)

TENTATIVE SYLLABUS
Spring 2015

INSTRUCTOR	Chris Maio 907-474-5651 cvmaio@alaska.edu
OFFICE	Reichardt Building, Room 368
OFFICE HOURS	Monday 3:00 – 5:00 Thursday 10:00 – 12:00 And by appointment
TEACHER ASSISTANT	Job Noordeloos jnoordeloos@alaska.edu ARHRB 182 Office hours by appointment
LECTURES	Reichardt Building, Room 203 MWF Class Time: 1:00 - 2:00
LABORATORY	Reichardt Building, Room 233 (F01) Tue 2:00 – 5:00 **(F02) Wed 2:15 – 5:15**

IMPORTANT SCHEDULE NOTE: Three mandatory field trips are included as part of the lab component and are scheduled for 2/18, 3/26, and 4/29. Unlike regular labs held on Tuesdays (F01) and Wednesdays (F02), field trips will occur ONLY during WEDNESDAY slots. To avoid scheduling conflicts students are strongly encouraged to register within the F02 section.

BOOK

Required: Geosystems, 7th Edition -- R. Christopherson: This is not the most recent edition and is available from a variety of sources. There will be two copies within the reserve section of the library and the instructor has a limited number of copies to loan to students.

COURSE DESCRIPTION

Elements of Physical Geography will explore the processes that create and shape Earth's physical environment. A global systems approach will be used to describe elements of, and interactions between, the atmosphere, hydrosphere, lithosphere, and biosphere. The topic of global climate change will serve as a capstone that integrates course concepts allowing for a comprehensive understanding of Earth surface processes. Lab section includes hands-on activities to reinforce lecture material and 3 field trips. Special lab fees apply.

COURSE GOALS

This course will provide students with a global perspective on Earth surface processes and the interdependent linkages between the lithosphere, hydrosphere, atmosphere, and biosphere. Students will gain practice in the challenges of thinking critically through classroom and laboratory exercises. Through a research report and presentation students will become better writers and communicators. This course is designed to develop an integrated knowledge base from which students will explore and critically assess global environmental change.

TEACHING METHODS

This course will combine traditional lectures with hands-on learning activities within the laboratory and field trips. Lecture topics will focus on the fundamental principles of physical geography while integrating student interests and current events. These topics will then be reinforced through laboratory assignments and field trips to develop a well-rounded understanding of the Earth's systems.

LEARNING OUTCOMES

- Students will gain knowledge of how to describe, understand and identify the different landscapes and processes that shape the surface of our planet.
- Students will learn the general principles of physical geography including the interactions between the hydrosphere, atmosphere, biosphere, and lithosphere.
- Students will interact and critically discuss course concepts within a group during in-class discussions.
- Students will design and orally present a research topic.
- Students will improve the quality of their research and writing skills through the development of a research paper.

COURSE POLICIES

Expectations

Students are expected to come to class prepared and on time. This includes reading the assigned material, having completed all assignments that are due and being prepared to discuss the course material. There is also an expectation that students within the lab and classroom will act with professionalism and be respectful to other students, the instructor, and guests. A failure to meet these expectations will result in a lowering of the final course grade and dismissal from the class in which the expectations were not met.

Attendance and Participation

In class, attendance and participation will be worth a total of 10% of the final grade. Attendance will be taken at the beginning of every class and will count 5%, whereas participation during in-class notecard assignments is worth an additional 5%. If there is an emergency or other important obligation which prevents a student from attending class they are expected to email the instructor prior to the absence. If students do not email prior to the absence, points will be deducted from the participation grade and other related course work. Students are responsible for ascertaining what materials and/or assignments were missed even if their absence from class was excused.

Media Devices

Cell phones are to be switched off or placed in silent mode. Calls, Texts, and web browsing is not allowed during class periods, unless the instructor (prior to class) has granted permission. Violation of this policy will lead to a loss of grades. Laptops may be used for in-class note taking but use of email, social media or viewing of websites not relevant to the current class is not allowed, and will lead to a loss of grades.

Blackboard

All course materials and important announcements will be posted on Blackboard. This includes the most current version of the syllabus, lectures, and exercises. Students are required to visit Blackboard regularly to stay up to date with course materials and announcements.

STUDENT CONDUCT

UAF students are subject to the Student Code of Conduct. UAF will maintain an academic environment in which freedom to teach, conduct research, and administer the university is protected. Students will benefit from this environment by accepting responsibility for their role in the academic community. The principles of the student code are designed to encourage communication, foster academic integrity and defend freedoms of inquiry, discussion and expression across the university community. For a complete description of the University's Code of Conduct please go to http://www.uaf.edu/catalog/catalog_14-15/pdf/04_Academics.pdf and see Academics and Regulations.

ACADEMIC HONESTY WILL BE STRICTLY ENFORCED WITHIN THIS COURSE. CHEATING AND PLAGIARISM WILL NOT BE TOLERATED. ANY STUDENT CAUGHT PLAGIARIZING OR CHEATING WILL RECEIVE AN AUTOMATIC ZERO ON THE ASSIGNMENT IN QUESTION AND MAY BE REPORTED TO THE UNIVERSITY AUTHORITIES TO FACE FAILURE IN THE COURSE OR EXPULSION.

STUDENT SUPPORT SERVICES

Students with Disabilities

UAF is committed to equal opportunity for students with disabilities. Students with disabilities are encouraged to contact the coordinator of Disability Services (Mary Matthews) at the Center for Health & Counseling (907-474-7043 or uaf-disabilityservices@alaska.edu), to enlist the appropriate support. I will collaborate to provide accommodations and support or services to assist students in meeting the goals of the course.

Veteran Support

It is an honor to have veterans attending UAF and every accommodation will be made to support their success in this course. Please let me know if there is anything that can be done to facilitate your transition or continuation of an academic career and contact Walter Crary below.

Walter Crary is the Veterans Service Officer at the Veterans Resource Center, 111 Eielson Building. 907-474-2475.
Email: wecrary@alaska.edu

Fairbanks Vet Center 907-456-4238. VA Community Based Outpatient Clinic at Ft. Wainwright is 907-361-6370.

STUDENT EVALUATION

Assignment	Points	Total Percent Course
EXAMS		**30%**
Exam 1	100	
Exam 2	100	
Exam 3	100	
LAB & FIELD TRIP COMPONENT		**30%**
Lab Assignments (11)	220	
Field Trips (3)	80	
RESEARCH PAPER		**12%**
Topic Choice	10	
Outline and Source page	30	
Draft 1	30	
Final Draft	50	
PRESENTATION		**8%**
Draft 1	20	
Draft 2	20	
In-Class Presentation	40	
EXERCISES		**10%**
Exercise 1	20	
Exercise 2	20	
Exercise 3	20	
Exercise 4	20	
Exercise 5	20	
ATTENDANCE & PARTICIPATION		**10%**
Attendance	50	
Participation (Notecard)	50	
EXTRA CREDIT – CURRENT EVENT		***4%***

Grading Scale

Grade	%	Grade	%
A+	97-100	C+	77-79
A	93-96	C	74-76
A-	90-92	C-	70-73
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
		F	<60

ADDITIONAL ASSIGNMENT INFORMATION

1) **Exams:** The three exams will be non-cumulative and include multiple choice, matching, T/F, and short answer questions. Additionally, there will be 1 essay per exam. A review session will be held prior to each exam.

2) **Research Paper:** The research paper will be 6-8 pages long with 12 pt. Times New Roman double spaced font. Detailed instructions will be provided in class. Students will choose a research topic based on course topics and interests.

3) **Presentation:** This assignment will consist of a 10-15 slide PowerPoint presentation. The topic will be based on the Research Paper. The presentations will be given during class at the end of the semester.

4) **Exercises:** The five exercises consist of a series of questions drawn from lecture and reading materials. Some exam questions will be drawn directly from exercises.

5) **Extra-Credit Current Event:** To receive points a student must clip/print a newspaper/magazine article of a current event that relates to class. Mount the article on a larger piece of paper and next to it paste a one paragraph summary of the event. The student will then briefly (4-5 minutes) present the current event during class. Printed digital formats will also be accepted. Each submission will be worth 20 points with a limit of two per student.

EVALUATION SCHEDULE (NOT INCLUDING LAB ASSIGNMENTS)

Due Date	Assignment	Course Points
1/16-5/4	ATTENDANCE	50
1/16-5/4	PARTICIPATION (Notecard Assignments)	50
2/2	Exercise 1	20
2/16	Exercise 2	20
2/18	EXAM 1	100
2/23	Research Paper: Topic Summary	10
3/4	Research Paper: Outline and Bibliography	30
3/11	Exercise 3	20
3/13	EXAM 2	100
3/23	Research Paper: Draft 1	30
4/6	Research Paper: FINAL DRAFT	50
4/10	Exercise 4	20
4/13	Presentation: Draft 1	20
4/24	Presentation: Draft 2	20
4/27	Exercise 5	20
4/29	Presentation: IN-CLASS PRESENT	40
5/5 – 5/8	EXAM 3	100
	TOTAL POINTS	**700**

TENTATIVE COURSE SCHEDULE

Week	Date	Lectures	Reading	Assignments Due
1	16 Jan F	*Lecture 1: Course Introduction*	Syllabus and Ch. 1 pg. 1-33	
2	19 Jan M	**NO CLASS** **Alaska Civil Rights Day**	Chapter 1 pages 1-33	
	21 Jan W	*Lecture 2: Syllabus Questions and the Essentials of Geography*	Chapter 1 pages 1-33	Thoroughly read and review Syllabus
	23 Jan F	*Lecture 3: Introduction to the Earth*	Chapter 2 Pages 41-59	
3	26 Jan M	*Lecture 4: The Sun: Center of our Solar System*	Chapter 2 Pages 41-59	
	28 Jan W	*Lecture 5: Insolation and the Solar Spectrum*	Chapter 3 Pages 61-85	
	30 Jan F	*Lecture 6: Earth's Modern Atmosphere*	Chapter 3 Pages 61-85	
4	02 Feb M	*Lecture 7: Earth Energy Essentials*	Chapter 4 Pages 89-100	Exercise 1
	04 Feb W	*Lecture 8: H2O: The Amazing Water Molecule*	Chapter 7 Pages 175-203	
	06 Feb F	*Lecture 9: The Water Cycle*	Chapter 7 Pages 175-203	
5	09 Feb M	*Lecture 10: Hydrosphere: Oceans of Earth*	Chapter 16 Pages 498-501	
	11 Feb W	*Lecture 11: Hydrosphere: The Great Ocean Conveyor*	Ch. 6 pg. 167-170 Ch. 9 pg. 245-273	
	13 Feb F	*Lecture 12: The Crysophere: Permafrost in the Arctic*	Chapter 9 Pages 245-273	
6	16 Feb M	EXAM REVIEW		Exercise 2
	18 Feb W	**EXAM 1**	Chapter 11 Pages 321-356	
	20 Feb F	*Lecture 13: The Lithosphere Cycle I*	Chapter 11 Pages 321-356	
7	23 Feb M	*Lecture 14: The Lithosphere Cycle II*	Chapter 12 Pages 359-399	Research Paper: Topic Summary
	25 Feb W	*Lecture 15: Plate Tectonics: Divergent Convergent, and Transform Margins*	Chapter 12 Pages 359-399	
	27 Feb F	*Lecture 16: Earthquakes and Volcanism*	Chapter 12 Pages 359-399	
8	02 Mar M	*Lecture 17: Tectonic Hazards along the Ring of Fire*	Chapter 19 Pages 605-645	
	04 Mar W	*Lecture 18: Biosphere: Biogeochemical Cycles*	Chapter 19 Pages 605-645	Research Paper: Outline and Bibliography
	06 Mar F	*Lecture 19: Biosphere: Ecosystems*	Chapter 19 Pages 605-645	

Week	Date	Lectures	Reading	Assignments Due
	11 Mar W	EXAM 2 REVIEW		Exercise 3
	13 Mar F	**EXAM 2**		
10	16 - 20 Mar	***SPRING BREAK***	Research Paper Sources	
11	23 Mar M	*Lecture 20: River Systems and Landforms*	Chapter 14 Pages 431-465	Research Paper: Draft 1
	25 Mar W	*Lecture 21: TBA*	Chapter 14 Pages 431-465	
	27 Mar F	*Lecture 22: Coastal Processes I*	Chapter 16 Pages 501-529	
12	30 Mar M	*Lecture 23: Coastal Processes II*	Chapter 16 Pages 501-529	
	01 Apr W	*Lecture 24: Glacial Modification of Terrain I*	Chapter 17 Pages 531-571	
	03 Apr F	*Lecture 25: Glacial Modification of Terrain II*	Chapter 17 Pages 531-571	
13	06 Apr M	*Lecture 26: Natural Recorders of Climate Change*	Chapter 17 Pages 531-571	Research Paper: Final Draft
	08 Apr W	*Lecture 27: Pleistocene Climate Change*	Chapter 17 Pages 531-571	
	10 Apr F	*Lecture 28: Holocene Climate Change*	TBA	Exercise 4
14	13 Apr M	*Lecture 29: Sun Spots: The Medieval Warm Period and Little Ice Age*	TBA	Presentation: Draft 1
	15 Apr W	*Lecture 30: Humans and the Environment*	Chapter 21 Pages 677-687	
	17 Apr F	*Lecture 31: Current Trends in Global Warming I*	Chapter 21 Pages 677-687	
15	20 Apr M	*Lecture 32: Current Trends in Global Warming II*	TBA	
	22 Apr W	*Lecture 33: Environmental Policy, Management, and Action*	TBA	Presentation: Draft 2
	24 Apr F	**NO CLASS - SPRINGFEST**		
16	27 Apr M	EXAM REVIEW		Exercise 5
	29 Apr W	*Student Presentations & PIZZA*		Research Presentation
	01 May F	*Student Presentations & PIZZA*		Research Presentation
17	04 May M	*Student Presentations/Study Session*	LAST DAY CLASSES	
	May 05-08	**EXAM 3**	Location TBA	

LABORATORY AND FIELD TRIP COMPONENT

LATE ASSIGNMENTS

All lab and field trip assignments are due by the beginning of the next lab period, unless otherwise requested by your instructors. Any late submissions will incur a penalty of 10% per day.

SCHEDULE

Attending Lab sessions and field trips is mandatory for this class. Students will be responsible for being prepared for outside labs and field trips. The GEOG 111 lectures combine students from two sections, but students must only attend the lab section on the day for which they are registered. If you cannot make your scheduled lab section on a particular week, but could attend the other section, you must clear this with the lab instructor prior to doing so.

TENTATIVE LAB SCHEDULE

Lab	Tuesdays	Wednesdays	Subject
	20-Jan	21-Jan	NO LAB
1	27-Jan	28-Jan	Introduction to Maps (Scale, Projections, etc.)
2	3-Feb	4-Feb	Eratosthanes [Outside Lab]
3	10-Feb	11-Feb	Weather
4	18-Feb WEDNESDAY ONLY		Field Trip 1: Permafrost Tunnel **[Mandatory]**
5	24-Feb	25-Feb	Principles of Water
6	3-Mar	4-Mar	Lithosphere Cycle - Rocks
7	10-Mar	11-Mar	Tectonics
	17-Mar	18-Mar	SPRING BREAK
8	26-Mar WEDNESDAY ONLY		Field Trip 2: Museum of the North **[Mandatory]**
9	31-Mar	1-Apr	TBA
10	7-Apr	8-Apr	Landscape Interpretation [Outside Lab]
11	14-Apr	15-Apr	Intro to GPS [Outside Lab]
12	21-Apr	22-Apr	Field Mapping [Outside Lab]
13	WEDNESDAY ONLY 29-Apr		Field Trip 3: Fairbanks Landforms **[Mandatory]**