Course Syllabus ATM 620: Climate Journal Club (Focus on Climate Extremes), 3 credits Department of Atmospheric Sciences University of Alaska Fairbanks Spring 2015

Instructor of record: Ums S. Bhatt (474-2662, usbhatt@alaska.edu, Akasofu 307)

When: FRIDAY 3-4 PM, 319 Akasofu

CRN: 34359 Office Hours: N/A

Prerequisites: Graduate Standing and a basic knowledge of meteorology and/or oceanography, climate, such that the student is able to read and comprehend current journal articles reasonably well.

Course Description:

We will read and discuss current scientific literature on the topic of the climate extremes!! You will not only learn the science but we will also work on writing skills! We will critique the writing of the chosen papers in the context of this excellent book on scientific writing!

Materials needed:



- Required Text Book: Writing Science by J. Schimel
- Resources: pdfs will be provided of weekly papers

Course Goals:

To become familiar with the current state of the topic of extreme climate and improve your scientific writing.

Course Policies:

Students are expected to do the reading for each class and be prepared to discuss a) chapter from 'Writing Science' and then b) discuss the paper of the week. The students should have a cogent evaluation of the paper and apply the advise from 'Writing Science' to evaluating the writing of the paper of the week.

Instructional Methods:

This course will be a discussion class where each week half of the time will be spend discussing chapters of the book 'Writing Science' and the other half discussing the paper

of the week. The topics for a given week from 'Writing Science' will be applied to the discussion of the paper that pertains to the quality of the writing.

Expected Proficiencies (Student Learning Outcomes):

- Learn to discuss science in an effective manner
- Develop skills to read papers critically
- Improve scientific writing skills with a focus on paper structure
- Improve the quality of your presentations

Timetable: Papers will be chosen for weeks 3-15 as the semester progresses.

class #1 Jan 16, 2015	Writing Science (Ch. 1-2, page 1-15)
	Paper 1: Easterling, et al., 2000: Climate Extremes: Observations,
	Modeling, and Impacts. <i>Science</i> , 289 , 2068–2074,
	doi:10.1126/science.289.5487.2068.
class#2 Jan 23, 2015	Writing Science (Ch. 3, page 16-25),
	Paper 2 tentative: Ghil, M., et al: Extreme events: dynamics, statistics and
	prediction, Nonlin. Processes Geophys., 18, 295-350, doi:10.5194/npg-18-
	295-2011, 2011. (not all just parts)
class#3 Jan 30, 2015	Writing Science (Ch. 4, page 26-34)
class#4 Feb 6, 2015	Writing Science (Ch. 5, page 35-49)
class#5 Feb 13, 2015	Writing Science (Ch. 6, page 50-57)
class#6 Feb 20, 2015	Writing Science (Ch. 7, page 58-66)
class#7 Feb 27 2015	Writing Science (Ch. 8, page 67-82)
class#8 Mar 6 2015	Writing Science (Ch. 9, page 83-94)
class#9 Mar 13 2015	Writing Science (Ch. 10, page 95-103)
class#10 Mar 27 2015	Writing Science (Ch. 11, page 104-111)
class#11 Apr 3 2015	Writing Science (Ch. 12, page 112-123)
class#12 Apr 10 2015	Writing Science (Ch. 13, page 124-132)
class #13 Apr 17 2015	Writing Science (Ch. 14, page 133-144)
class #14 Apr 24 2015	Writing Science (Ch. 15, page 145-157)
class #15 May 1 2015	Writing Science (Ch. 16 page 158-173)

Evaluation:

Students are expected to attend the class, do the required reading, participate and lead one class discussion. Each student will lead a discussion for at least one journal article while the instructor will teach the part of the class about writing each week. The class will be graded Pass/Fail. A passing grade requires an overall percentage of 80% or greater. 50% of the grade will be based on attendance and class participation, while the other 50% will be based on the class presentation (paper led by the student).

Support Services:

Additional help can be obtained from the instructor, DAS faculty, and DAS students who have expertise on the topic of concern.

Disabilities Services:

The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. We will work with the Office of Disabilities Services (203 WHIT, 474-7043) to provide reasonable accommodation to students with disabilities.