

Climate Change and Society

GEOL-G490

Lecture 1: Introduction



Monday/Wednesday 9:00-10:15AM

Room: SL 085

Instructor

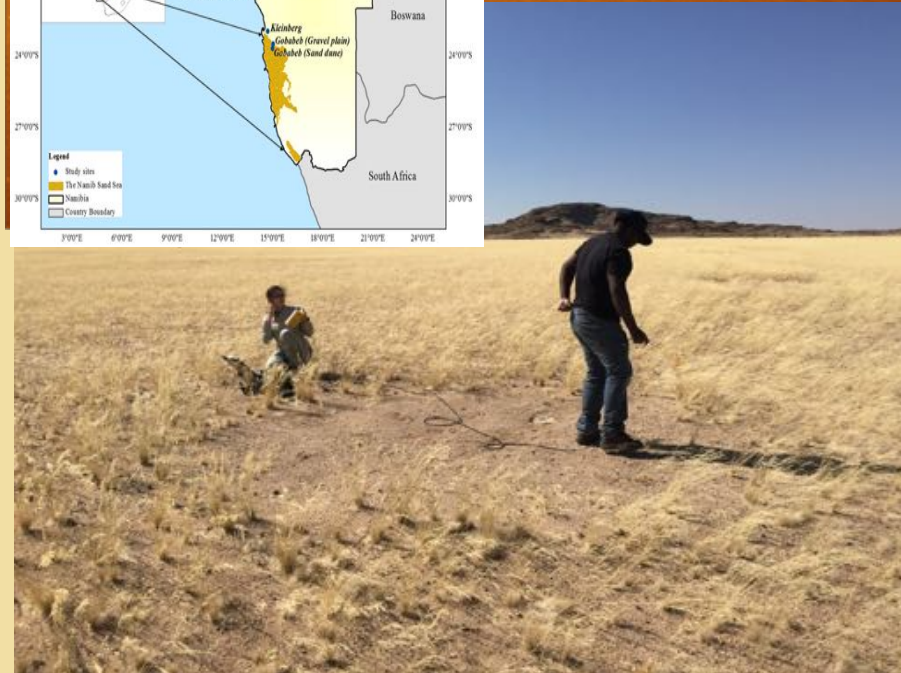
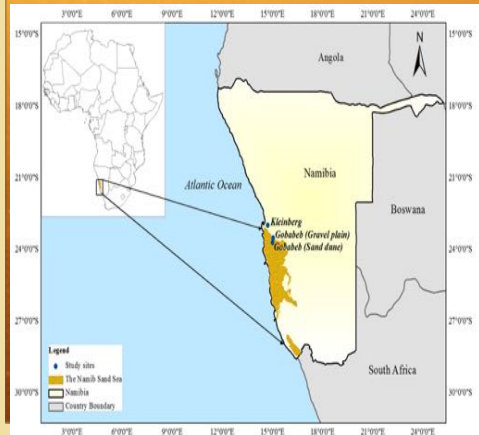
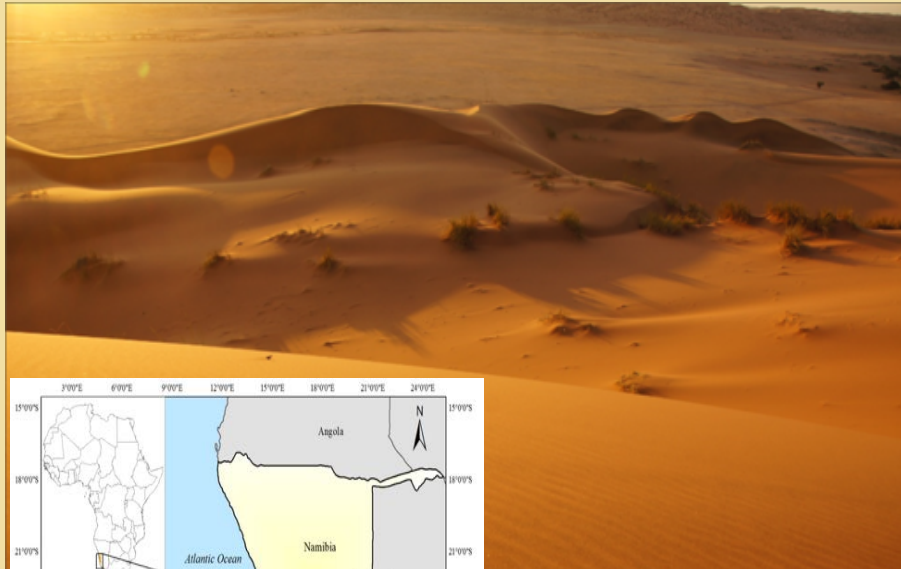
✦ Dr. Lixin Wang

Research Interests: Ecohydrology and Biogeochemistry



[http:// earthsciences.iupui.edu/~lxwang](http://earthsciences.iupui.edu/~lxwang)

Examples of ecohydrology work



The effects of droughts on agriculture



Legume



Cereal

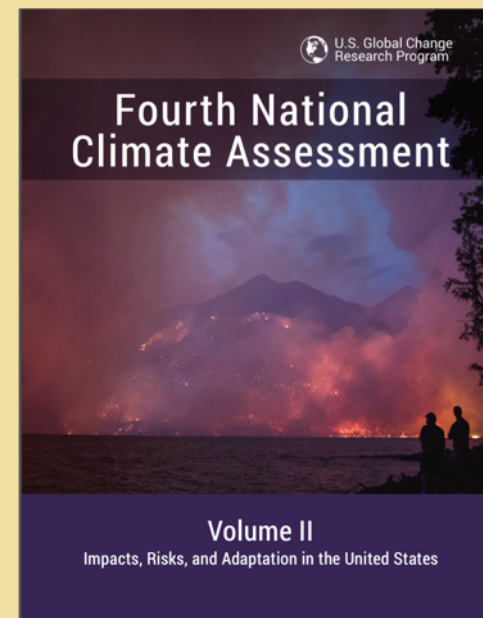


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Textbook

No required textbook

Lecture notes and supplementary readings will be the primary source of knowledge



Goals for this Class

- ✦ Familiar with common terminology used in climate science
- ✦ Understand the geo-methods to study climate science
- ✦ Understand the causes and consequences of climate change
- ✦ Understand the impact of climate change on the nexus of food, energy and water systems
- ✦ Enhanced communications of climate change science

Attendance

Lecture attendance is mandatory and you will be responsible for all the information presented in class

No penalty for missing 1 class without reason; the 2nd miss needs a legitimate reason; If you know that for some (legitimate) reason you will need to miss more than two classes during the semester, please talk to me in person ahead of the time.

Field trip activities attendance is also required

Communication Information

☐ Canvas

Homework and grades are posted in Canvas.

Slides are posted in Canvas.

☐ Office Hours: By appointment only

☐ Office Location: SL 118M

Assignments and Exams

- ✦ Assignments are open book, may be submitted through Canvas but comments only returned on paper copies. No late submission will be accepted.
- ✦ Exam is taken in class, closed-book, multiple choice, matching, calculation, and short answer.
- ✦ One seminar paper

Grading

✦	Exam:	30
✦	Homework (2)	30
✦	Seminar presentation:	20
	(Final exam)	
✦	Seminar paper:	10
✦	Class participation	10

Grade	A ⁺	A	A ⁻	B ⁺	B	B ⁻	C ⁺	C	C ⁻	D ⁺	D	D ⁻	F
Range:		< 97 %	< 93 %	< 90 %	< 87 %	< 83 %	< 80 %	< 77 %	< 73 %	< 70 %	< 67 %	< 63 %	< 60 %
	100 %	%	%	%	%	%	%	%	%	%	%	%	%
	to	to	to	to	to	to	to	to	to	to	to	to	to
	97 %	93 %	90 %	87 %	83 %	80 %	77 %	73 %	70 %	67 %	63 %	60 %	0 %

Class Schedule

- ✦ Syllabus is flexible
 - ✦ Partly based on the background of students
 - ✦ Intellectually challenging
- ✦ Emphasis will be on physical processes

Class Groups

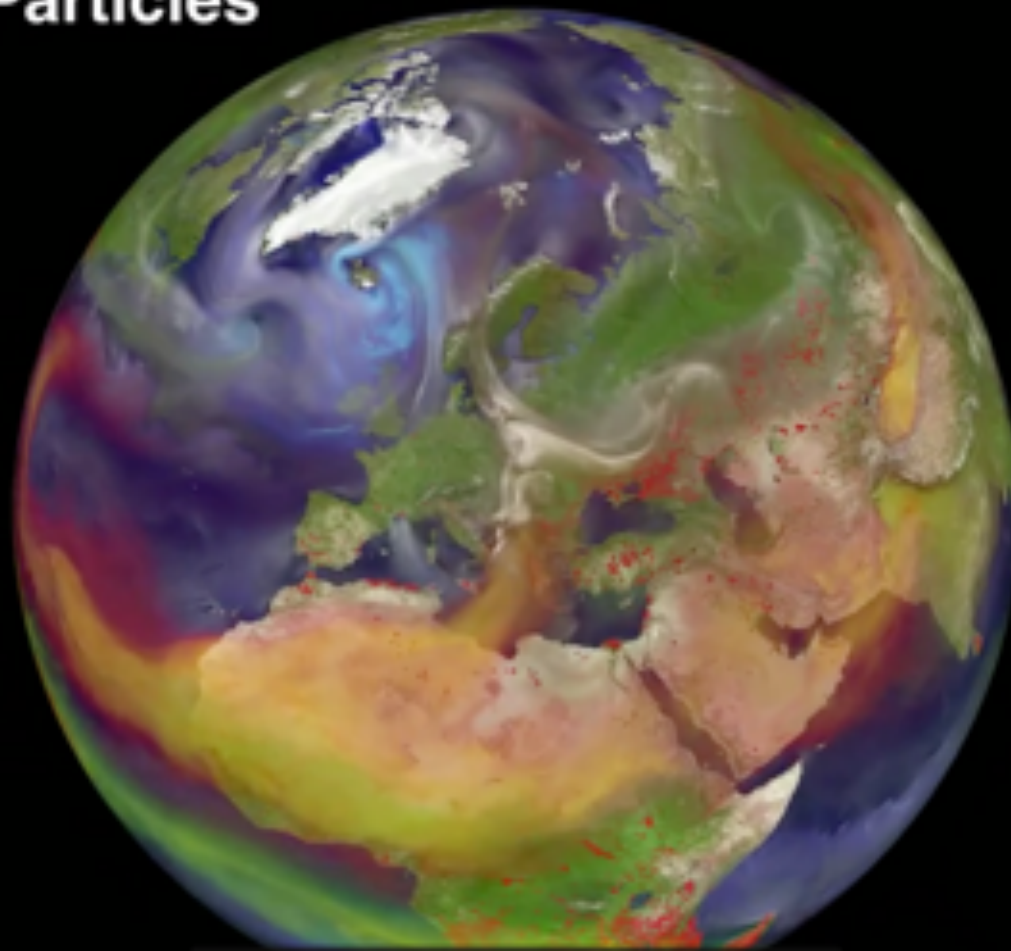


Climate change impact on water availability

Climate change impact on food security

Climate change impact on energy

Atmospheric Particles



Fires
Sulfates
Dust
Organic C
Sea Salt

in the white wisps of sulfate pollution in Europe,

Sep 06-Apr 07
NASA/GSFC