☼ NATS 101, Lec 51+52 INTRODUCTION TO GLOBAL CHANGE - Fall 2010 ☼

Time / Place: T TH 12:30 - 1:45 pm in ILC 140

Class Webpage: fp.arizona.edu/kkh/nats101gc/

COURSE DESCRIPTION -- Introduction to Global Change presents the basics of physical science within the context of global environmental changes (climatic change, global warming, ozone depletion, deforestation, etc.) that impact Earth and its inhabitants. The course involves hands-on activities, discussions, online work & interactive learning teams.

PROFESSOR -- Dr. Katie Hirschboeck *(Laboratory of Tree-Ring Research)* **Email:** *katie@LTRR.arizona.edu*
Phone: 621-6466 **Office:** Tree-Ring Laboratory, **rm 208 West Stadium** *(a map to my office is on last page of Class Notes)*
Office hrs: Wednesdays 2 -3 pm or by appointment on Fridays *(arrange time in advance via email for Friday appts)*

GRADUATE TEACHING ASSISTANTS GTA office hours are held in ILC 104 B

Rebecca Franklin – (Geosciences) *rebecca@ltrr.arizona.edu* **Office hrs:** Tue 9-10 am & Thu 11:15 am - 12:15 pm
Jacquie Dewar – (Natural Resources) *dewarjacqueline@gmail.com* **Office hrs:** Thu 9-10 am
Kanin Routson – (Arid Lands) *kaninroutson@gmail.com* **Office hrs:** Mon 2:30 - 3:30 & Wed 10:30 - 11:30 am
Elizabeth May – (Anthropology) *emmay@email.arizona.edu* **Office hrs:** Tue 2:15 – 3:15 pm

TEXTBOOKS *(Both are REQUIRED)* – ***The Science of Global Change, An Introduction*** + ***Dire Predictions, Understanding Global Warming*** - Available for purchase in ASUA bookstore separately (used) or as a package (new)

CLASS NOTES *(REQUIRED)* **--** Includes notes for each class period and supplementary info. Available in the ASUA bookstore. If they are not on the shelf, *YOU MUST PLACE AN ORDER* (turn-around time is about a day.)

TURNING TECHNOLOGIES RESPONSE CARD & INTERNET ACCESS *(REQUIRED)* – This class uses "clickers" in the classroom and **D2L online tools.** You will need to bring your clicker to each class & access D2L daily to keep up with the course material. Regular internet access will also be needed for class assignments, etc.

Code of Academic Integrity & NATS 101-GC Course Policies: The UA Code of Academic Integrity can be found at: http://deanofstudents.arizona.edu/codeofacademicintegrity **You are responsible for knowing it, understanding it, and adhering to it!** NO exceptions! In addition to the Code, you are responsible for knowing and adhering to all **NATS 101-GC Course Policies** as specified in the **Course FAQ at**: http://fp.arizona.edu/kkh/nats101gc/faq.htm

Honors Credit is available for this course in Sec 52H by being a preceptor for the class. Contact Dr. H for more details.
Undergraduate Preceptorships are available -- see our class webpage under **Teaching Team** for details.

Students with Disabilities: If you anticipate issues related to the format or requirements of this course, *please meet with Dr H as soon as possible and no later than September 10th* so that we can discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Resources (621-3268; drc.arizona.edu) and notify Dr. H of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations.

Your **final LETTER GRADE** will be based on the % earned of **500 possible points** in the class, distributed as follows. The letter grade cutoffs are: A (90-100%), B (80-89%), C (70-79%), D (60-69%), E (<60%)

	GRADED ACTIVITIES	Individual pts	Group pts
	Weekly online **Readiness Quizzes** 8 @ 5 pts, 1 @ 10 pts *(+ 2 "practice" quizzes)*	50	--
	In-Class Tests 4 @ 20 pts (individual) and 5 pts (group)	80	20
	Midterm Exam	100	--
	Final Exam	100	--
	Group Assignments (in-class) 5 @ 5 pts	--	25
	Individual Assignments (homework) 4 @ 20 pts	80	--
	Personal Project ("Linking GC Science to Life")	30	--
	Clicker Individual & Team participation points	10	5
	Occasional Bonus points	*(extra)*	*(extra)*
	TOTAL POINTS (% POSSIBLE out of **500**)	**450** (90%)	**50** (10%)

➔ ***ASSIGNMENT I-1 Course Logistics & Your Ecological Footprint (DUE Thursday SEPT 2)*** ➔

Follow the directions posted under ASSIGNMENTS in D2L or under QUICK LINKS if you do not yet have D2L Access.

☼ NATS 101-Lec 51 + 52 SEMESTER-ON-A-PAGE -- FALL 2010 ☼

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
AUGUST	AUG 22	23 *First day of classes*	**24** #1 – Course Overview	25	**26** #2 – On Science & Being a Scientist	27	28
	29	30	**31** #3 – Global Change & the Challenge of Quantifying It	SEP 1	**2** #4 – Energy & Matter Overview **RQ-1 CUTOFF**	3	4
SEPTEMBER	5	6 *Labor Day - no classes*	**7** #5 – Observations: Climate Change & Variability in the Past & Present	8	**9** #6 – Electromagnetic Radiation & Spectrum **RQ-2 CUTOFF**	10	11
	12	13	**14** Special Topic: Introduction to Tree Rings	15	**16** **TEST #1**	17 *Last day to drop via w/o a grade*	18
	19	20	**21** #7 – The Radiation Laws	22	**23** #8 – Atmo Structure & Chemical Composition **RQ-3 CUTOFF**	24	25
	26	27	**28** #8 – Atmo Structure & Chemical Composition (cont.)	29	**30** #9 – Thermodynamics Energy Transfer / Conservation **RQ-4 CUTOFF**	OCT 1	2
OCTOBER	3	4	**5** **TEST #2**	6	**7** Class Bristlecone Pine Activity	8	9
	10	11	**12** Class Bristlecone Pine Activity	13	**14** **MIDTERM EXAM**	15 *Last day to drop a class with grade of W*	16
	17	18	**19** #10 – The Global Energy Balance	20	**21** #11 – Systems & Feedbacks **RQ-5 CUTOFF**	22	23
	24	25	**26** #12 – How Climate Works	27	**28** #13 – Natural Climatic Forcing **RQ-6 CUTOFF**	29	30
NOVEMBER	31	NOV 1	**2** **TEST #3**	3	**4** #14 – Global Warming & Anthropogenic Forcing **RQ-7 CUTOFF**	5	6
	7	8	**9** #14 – Global Warming & Anthropogenic Forcing (cont.)	10	**11** *Veteran's Day -- no classes*	12	13
	14	15	**16** #15 – Ozone Depletion in the Stratosphere **RQ-8 CUTOFF**	17	**18** **TEST #4**	19	20
	21	22	**23** #16 The IPCC Findings: Projections & Impacts	24	25 *Thanksgiving*	26 *Break*	27
DECEMBER	28	29	**30** #17 Adaptations, Solutions & Choices	DEC 1	**2** #17 Adaptations, Solutions & Choices (cont.)	3	4
	5	6	**7** Global Change Wrap-Up & Climate Science Literacy **RQ-9 CUTOFF**	*8 Last day of classes*	9	10	11
	12	13	14	15	**16 FINAL EXAM** *(Sorry, no early final exams given)*	17 *Finals End*	18 *Semester Ends*

➔ RQ = online Readiness Quizzes RQ's should be completed after first taking the corresponding online Self Test (ST) and not later than **30 minutes before class begins** on the **CUTOFF DATES** listed above.

Our FINAL EXAM is on Thursday Dec 16 @ 11:00 am - 1:00 pm in ILC 140 *(Sorry, no early finals given)*