

EESA06: Introduction to Planet Earth 2013

Instructor: Lisa Tutty BSc (hon) MSc PhD candidate.

Office Hours - Mondays 12:30-1:30 in Portable 104 Room 109 at UTSC

Mondays 4:30-5:30 and Thursdays 10:30 - 11:30 in ES4101 at the St. George Campus

Contact - At the lecture hall before or after class or during the break, at office hours, or on the **Blackboard discussion board** at <http://portal.utoronto.ca>. Please do NOT email me regarding course material, if the question is of a *personal* nature (ex. illness) then my email is tutty@utsc.utoronto.ca and you must email from a utoronto email account and put EESA06 in the subject line.

Course Description: This course explores the composition, structure and origin of the Earth and the physical and biological processes that operate in and on it; the history of the Earth as revealed in the rock record. The flows of energy and mass through natural systems, and the impact of human activity on system processes, with particular reference to land use change, soil degradation and atmospheric pollution.

Breadth requirement: Natural Sciences.

Exclusion: GGR100Y, GLG110H.

Marks:

Homework assignments (***choose two*** of the six options, *various* due dates Fe 11 - Ma 18) **30%**

Midterm test (to be scheduled by the registrar, **all students will write at UTSC**) **30%**

Final exam **40%** (check the registrar's website for the schedule, **all students will write at UTSC**)

Textbook: The *custom* textbook is *brand new this year*. It is called EESA06 and has a 10 digit ISBN 1259090086 or a 13 digit ISBN 9781259090080. You can buy the book in print at the UTSC bookstore. There are *exclusive* study suggestions and questions in your textbook. The old book will *not* work, sorry. I have also put it on short term loan (course reserve) at the library.

Late penalty: 10% *per day*, including weekends; unless you receive consideration - see section immediately below for details.

Missed midterm test or a deadline due to illness or another serious circumstance?

For illness you **must** have your medical professional complete the **University of Toronto medical certificate** (available in Course Materials on Blackboard). For other serious circumstances you must bring **appropriate documentation**. In either case, bring the required documentation marked to the attention of Lisa Tutty, EESA06 to **Joanne Terakita in SW644 within one week** of the missed deadline, along with a **one page written explanation** of how your illness/circumstance prevented you from completing your work/test. Include your name and student number as well as your utoronto email address in the letter. This is the **ONLY** procedure that can result in consideration for late or missed work/deadlines.

Missed final exam?: This matter **must** be taken up with the UTSC registrar, not me or DPES.

Homework assignment options (**choose two** of the six options):

SUBJECT	SKILLS and TOOLS	GENERAL TASK SUMMARY	DUE DATE
Earthquake (TA Nikqueta)	Minor math (ex. multiplication, division) Drafting compass to draw circles	Locate the epicentre of an earthquake using seismographs from three stations; determine magnitude of quake.	If you <u>choose</u> this option, it is due on Blackboard: Mon Feb 11 11:59pm
Volcano (TA Stephanie)	Synthesizing data regarding various volcanic hazards	Using a variety of data, determine the safest location for your new house.	If you <u>choose</u> this option, it is due on Blackboard: Mon Feb 25 11:59pm
Virtual field trip (Lisa/TA Nathan)	www.planetrocks.ca; internet research	Take a virtual trip around Ontario to see some really cool geologic sites and do an ' information ' treasure hunt .	If you <u>choose</u> this option, it is due on Blackboard: Mon Mar 4 11:59pm
Geologic Time (TA Nathan)	Math Microsoft Excel (or similar program)	Represent all of Earth's history (4.56 Ga) as one calendar year (ex. 2011). So on Jan 1st the Earth appeared. On what date would the dinosaurs appear? Go extinct?	If you <u>choose</u> this option, it is due on Blackboard: Mon Mar 4 11:59pm
Minerals (TA Stuart)	Writing APA format referencing Academic sources	Choose your favourite economic mineral and write a one page (single sided, single spaced) report about how it is mined and what it is used for. Where is it mined?	If you <u>choose</u> this option, it is due on Blackboard: Mon Mar 11 11:59pm
Grand Canyon (TA Tingting)	Minor math (ex. add, subtract) Graph paper and ruler; colouring	Draw a cross section diagram from a given map, sketch strata (layers) of rock in Grand Canyon; determine thickness of strata.	If you <u>choose</u> this option, it is due on Blackboard: Mon Mar 18 11:59pm

Course schedule - subject to change.

Date:	Lecture Topic:	Required Reading: from textbook <i>except</i> Mar11
M Ja 7	L1: Earth systems science; Earth's interior	McConnell, D; Steer, D; Owens, K; Knight, C (2010). The Good Earth: Introduction to Earth Science, 2nd Edition. Chapter 1.
M Ja 14	L2: Plate tectonics	Reynolds, S; Johnson, J; Morin, P (2013). Exploring Geology 3rd Ed. Chapter 3.
M Ja 21	L3: Minerals and Igneous Rocks	Reynolds, S; Johnson, J; Morin, P (2013). Exploring Geology 3rd Ed. Chapter 5.
M Ja 28	L4: Metamorphic and Sedimentary Rocks	Reynolds, S; Johnson, J; Morin, P (2013). Exploring Geology 3rd Ed. Chapters 7&8.
M Fe 4	L5: Natural Hazards	Reynolds, S; Johnson, J; Morin, P (2013). Exploring Geology 3rd Ed. Chapters 6&12.
M Fe 11	L6: Weathering & Erosion EARTHQUAKE DUE	Reynolds, S; Johnson, J; Morin, P (2013). Exploring Geology 3rd Ed. Chapter 15.
M Fe 18	<i>Reading Week</i>	<i>Fe 16 midterm test POSSIBILITY</i>
M Fe 25	L7: Geologic Time VOLCANO DUE	Reynolds, S; Johnson, J; Morin, P (2013). Exploring Geology 3rd Ed. Chapter 9.
M Mr 4	<i>Mar 2 midterm test possibility</i> L8: Geologic Resources. GEOLOGIC TIME & VIRTUAL TRIP DUE.	Reynolds, S; Johnson, J; Morin, P (2013). Exploring Geology 3rd Ed. Chapter 18.9-18.13 only. Plummer, C; Carlson, D; McGeary, D; Eyles, C; Eyles, N (2007). Physical Geology & the Environment, 2nd Canadian Ed. Chapter 12.
M Mr 11	L9: Evolution of Life on Earth. MINERALS DUE.	Christensen, B. & Maslin, M. (2008). Rocking the Cradle of Humanity: New thoughts on climate, tectonics and human evolution. Geotimes, 53(1): 28-33.
M Mr 18	L10: Geology of Canada. GRAND CANYON DUE.	Plummer, C; Carlson, D; McGeary, D; Eyles, C; Eyles, N (2007). Physical Geology & the Environment, 2nd Canadian Ed. Chapter 20.
Su Mr 24	<i>Drop Date 'S' courses</i>	
M Mr 25	L11: Climate change over geologic time	McConnell, D; Steer, D; Owens, K; Knight, C (2010). The Good Earth: Introduction to Earth Science, 2nd Edition. Chapters 16-17.
M Ap 1	L12: Changing land use & pollution; Guest lecture (Contaminated sites)	Reichard, J (2011). Environmental Geology. Chapter 15.
Ap 15-30	Final Exams	

OTHER MIDTERM TEST TIMES ARE POSSIBLE TOO - THESE ARE THE ONES I REQUESTED

Accessibility: Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the *AccessAbility* Services Office as soon as possible. I will work with you and *AccessAbility* Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC *AccessAbility* Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287 - 7560 or ability@utsc.utoronto.ca.

Academic Integrity: To receive **credit** for your poster assignment or for your homework assignments you **MUST** complete and sign and submit an **academic integrity checklist** for each.

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement
- Submitting your own work in more than one course without the permission of the instructor
- Making up sources or facts
- Obtaining or providing unauthorized assistance on any assignment

On tests and exams:

- Using or possessing unauthorized aids
- Looking at someone else's answers during an exam or test
- Misrepresenting your identity

In academic work:

- Falsifying institutional documents or grades
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (see <http://www.utoronto.ca/academicintegrity/>).

Academic Integrity Checklist. This form **MUST** be completed, signed and submitted to receive credit for each of your homework assignments.

<<Planet Earth 2013. HOMEWORK ASSIGNMENT>> Homework topic choice _____

<<Instructor Lisa Tutty>>

I, _____, affirm that this assignment represents entirely my own efforts.

I confirm that:

- I have acknowledged the use of another's ideas with accurate citations.
- If I used the words of another (e.g., author, instructor, information source), I have acknowledged this with quotation marks and proper citation.
- When paraphrasing the work of others, I put the idea into my own words and did not just change a few words or rearrange the sentence structure
- I have checked my work against my notes to be sure I have correctly referenced all direct quotes or borrowed ideas.
- My references section includes only the sources used to complete this assignment.
- This is the first time I have submitted this assignment (in whole or in part) for credit.
- Any proofreading by another was limited to indicating areas of concern which I then corrected myself.
- This is the final version of my assignment and not a draft.
- I have kept my work to myself and did not share answers/content with others, unless otherwise directed by my instructor.
- I understand the consequences of violating the University's academic integrity policies as outlined in the *Code of Behaviour on Academic Matters*.

By signing this form I agree that the statements above are true.

If I do not agree with the statements above, I will not submit my assignment and will consult the course instructor immediately.

Student name: _____ Signature: _____

Date: _____