



DEPARTMENT OF SCIENCE

COURSE OUTLINE – WINTER 2013

ES1000 – PLANET EARTH – 3(3-0-3) UT

INSTRUCTOR: Dr. Tanvir Sadiq

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OFFICE: J 209

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OFFICE HOURS: TBA or By Appointment

PREREQUISITE(S)/COREQUISITE: None

NOTE: This course is not available to students with credit in ES1010 or ES1020

REQUIRED TEXT: Skinner and Murck, *The Blue Planet*, 3rd Edition. eText available online at

<http://www.coursesmart.com/IR/1794570/9780471236436?hdv=6.8>

Contact your instructor for information on lab manual.

CALENDAR DESCRIPTION: Introduction to the origin and evolution of the Earth and the solar system, and plate tectonics and the rock cycle. Simple energy balances and interactions between radiation and the atmosphere, oceans, ice masses, and the global hydrological cycle. Evolution of life, biogeography, and global climate in the context of geological time. The carbon cycle. Human interaction with the Earth. Mineral and energy resources.

CREDIT/CONTACT HOURS: 3(3-0-3) UT

DELIVERY MODE(S): Lectures, Labs

TRANSFERABILITY: University of Alberta, University of Calgary*, Athabasca University, Augustana Faculty-University of Alberta, University of Lethbridge (*see important transfer information. Consult the Alberta Transfer Guide.)

EVALUATIONS:	Quiz	20%	(At the end of each topic)
	Labs	20%	
	Midterm	20%	(TBA)
	Final Exam	40%	(Cumulative, lab and lecture material included, TBA)

NOTE: MIDTERM EXAMINATION MISSED FOR ANY REASON WILL NOT BE RESCHEDULED. Students not writing the midterm exam, with a valid excuse (as defined by GPRC policy) will have the midterm weight added to the final exam. This is not automatic, and if you miss the midterm, you should follow all College guidelines and contact your instructor as soon as possible. There will be no makeup or deferral available for missed quizzes.

Your final grade will be available through the Registrar's office or on myGPRC portal. Grades or marks cannot be disclosed by email or phone and all such requests will be ignored.

STUDENT RESPONSIBILITIES: Students are expected to attend all classes and labs. If you miss a class, make arrangements to copy the notes from your class fellows. ***Attendance at labs is mandatory and all lab assignments must be completed and handed-in on time. Material covered in the Lab is testable on the final exam.***

STUDENTS WITH DISABILITIES: Students who require accommodation in this course due to a disability are advised to discuss their needs with student services. Please ensure that the required forms for exams are submitted to the instructor at least four business days before the date of the midterm or by the last lecture class for the final exam.

LECTURE SCHEDULE: (Tentative, subject to change)

Weeks	LECTURE TOPICS	Chapters
1, 2	<i>Foundation of the Earth:</i> Scientific method, Components of the integrated earth system; Earth in space; Geological time.	1, 2, 4
3, 4, 5	<i>Geosphere:</i> Minerals and rocks; Rock cycle; Plate tectonics.	3, 5, 6, 7
6, 7, 8	<i>Hydrosphere:</i> The water planet (surface water, groundwater, snow, ice, glaciers and oceans)	8, 9, 10
	<i>Midterm</i>	
9, 10, 11	<i>Atmosphere:</i> Composition; Dynamics and circulation; Weather systems; Climate changes.	11, 12, 13
12, 13, 14	<i>Biosphere:</i> Biology and geology; Elemental cycles; Organization of life in space and time; Biodiversity; Anthropogenic influences and resources.	14, 15, 16, 19

Lab Schedule will be available in the lab.

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the Student Conduct section of the College Admission Guide at

<http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct:

Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/**

**Note: all Academic and Administrative policies are available on the same page.

GRADING CRITERIA:

GRADING CONVERSION CHART – This is a general guideline only.			
Alpha Grade	4-point Equivalent	Percentage Guidelines (General)	Designation
A ⁺	4.0	90 – 100	EXCELLENT
A	4.0	85 – 89	
A ⁻	3.7	80 – 84	FIRST CLASS STANDING
B ⁺	3.3	77 – 79	
B	3.0	73 – 76	GOOD
B ⁻	2.7	70 – 72	
C ⁺	2.3	67 – 69	SATISFACTORY
C	2.0	63 – 66	
C ⁻	1.7	60 – 62	
D ⁺	1.3	55 – 59	MINIMAL PASS
D	1.0	50 – 54	
F	0.0	0 – 49	FAIL
WF	0.0	0	FAIL, withdrawal after the deadline

** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability

Disclaimer: Any typographical errors in this Course Outline are subject to change and will be announced in class.