

EAS 105 – The Dynamic Earth Through Time – Winter 2010

LECTURES: EAS 105 - Sec B2, Tuesday -Thursday 9:30–10:50 a.m., ESB 1-31

INSTRUCTOR: Dr. Martyn Unsworth (e-mail : unsworth@UAlberta.ca)
Office : CEB 348B, 492-3041

OFFICE HOURS: Please e-mail or telephone to arrange a time.

LAB COORDINATOR: David Chesterman
(T3-34, 492-8494, e-mail david.chesterman@ualberta.ca)

REQUIRED TEXTBOOK : Monroe and Wicander, *The Changing Earth* (5th edition)

WEBSITE: <http://courses.eas.ualberta.ca/eas105/>

COURSE OUTLINE: The plate tectonic framework of a dynamic Earth as it relates to the origin of major groups of minerals and rocks. Earthquakes, structural geology, and the origin of mountain belts. Surface processes and their sedimentary products. History of life and extinctions. Not available to students with credit in EAS 101, 210 or SCI 100.

PRE-REQUISITE : EAS 100 or EAS102. [Faculty of Science.]

GFC POLICY ON COURSE OUTLINES

23.4(2)b. *“Policy about course outlines can be found in Section 23.4(2) of the University Calendar.”*

COURSE MARK-WEIGHT DISTRIBUTION:

Mid-term exam	20%	Thursday, February 11, 2010 in class
Labs	40%	
Final exam	40%	9 am Monday, April 19, 2010 – please check Beartracks)

Individual components of the course will be given a numerical mark.
No marks are given for class participation and other in-class activities. The final mark will be converted into the University of Alberta Letter Grade system. No particular distribution will be used to determine grades, and no absolute measures or marks will determine them. Rather, a combination of the two will be used (see GFC 29 SEP 2003, and Section 23.4(2) of the University Calendar).

LABORATORY WORK

Laboratory work is conducted weekly, unless stated otherwise in the schedule below.
Lab location and times: HMT 3-70, TR and F. The labs are **mandatory**.

The labs are graded by the teaching assistants. Each lab is graded equally. There is no lab midterm or final exam, however, lab material may be tested on the lecture midterm and final exams.

Students are to contact the lab coordinator if they miss a lab exercise
Lab Kit : Available at the University of Alberta Bookstore.

EXAMS

The final course exam is cumulative with an emphasis on the material and lab content covered after the midterm. Examples of past exam questions will be made available at the exam registry.

Deferred exam policy:

Anyone missing the midterm exam must provide a valid excuse in writing to the instructor. In this case the weight of the midterm will be rolled into the final exam: the final will count for 60% of the total course grade. If the instructor does not receive a valid excuse in writing, the midterm will be assigned a mark of zero %.

Only the Faculty of Science Office can grant deferrals for final exams. Check the University regulations posted on-line and in the University Calendar.

LABORATORY TOPICS AND SCHEDULE

Week beginning		
January 4		NO LABS
January 11		NO LABS
January 18	Lab 1	Minerals and their atomic structure Mineral identification
January 25	Lab 2	Igneous processes and rocks Geological map and air photo interpretation Rock identification
February 1	Lab 3	Sedimentary rocks Geological map and air photo interpretation Rock identification
February 8		No labs – Midterm Exam week
February 15		No labs – Reading week
February 22	Lab 4	Metamorphism and metamorphic rocks Mapping metamorphic zones Rock identification
March 1	Lab 5	Structural geology Structural block diagrams Map interpretation
March 8	Lab 6	Plate tectonics Mapping and geomorphic interpretation of tectonic zones Calculating plate movement rates
March 15	Lab 7	Precambrian Earth and life Fossils, Craton configurations, Shield rocks
March 22	Lab 8	Paleozoic Earth and life Fossil description and sketching
March 29	Lab 9	Mesozoic Earth and life Fossil description and sketching
April 5	Lab 10	Cenozoic Earth and life Fossil description and sketching

This lab schedule is tentative and may be changed.

REGISTRATION

Make sure you are properly registered. If your name appears on the official class list, you are properly registered. If not, make sure you correct that before the deadline at the Faculty of Science office.

You will NOT get credit for the course unless you are properly registered.

The class lists distributed to the instructors contain only your University of Alberta e-mail account. Messages will be sent only to that e-mail address. Make sure to check it, or forward messages to an account that you check regularly.

IMPORTANT DATES FOR WINTER TERM 2010

January 5	Winter Session classes begin
January 18	Winter Registration Deadline
February 15-19	Winter term Reading Week – no classes
April 2 and 5	Easter Holiday – University Buildings closed
April 12	Last day of classes, Winter term
April 16-29	Final examination, Winter term

SPECIALIZED SUPPORT AND DISABILITY SERVICES

Students who require accommodations in this course due to a disability affecting mobility, vision, hearing, learning, or mental or physical health are advised to discuss their needs with Specialized Support and Disability Services, 2-800 Students' Union Building, 492-3381 (phone) or 492-7269 (TTY). Please ensure that the required forms for exams are submitted to the instructor several days before the date of the midterms or final.

GFC POLICY ON ACADEMIC STANDARDS

23.4(2)c. *"The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (at www.uofaweb.ualberta.ca/secretariat/studentappeals.cfm) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University."*