Earth Sciences 1022B Course Outline: Earth Rocks! January - April 2018

Instructor: Dr. Sheri Molnar, BGS 1040; smolnar8@uwo.ca

Objectives: We will study what the Earth is made of (minerals and rocks), how it works (plate tectonics), and how it affects us. Focus is on surface processes, landforms, resources of our planet – natural features and actions that we can see, including natural disasters such as earthquakes, volcanoes, landslides, tsunamis, and floods.

No prerequisites; Anti-requisites: ES1070a/b, ES1081a/b; the former ES020, ES082a/b

Lectures: TBD (last year Tu, Th 930-1020 am in Natural Sciences Room 1)

Labs (2hr slot): TBD, 9 different sections in BGS1015

Recommended Text: Earth (3rd Can Ed. 2012); no manuals or electronic devices required

Course Assessments

10% - Online (OWL) quizzes 10%

20% - Feb midterm

30% - Final exam

15% - Weekly labs

10% - Feb lab quiz

15% - Mar lab exam

Timeline

Lectures		Labs	Quizzes
Jan 9 – Orientation	Jan 11 – Intro, Chap 1	No lab	No quiz
Jan 16 – Minerals	Jan 18 – Igneous Rocks	No lab	Quiz 1
Jan 23 – Volcanoes	Jan 25 - Weathering	Lab 1 – Minerals	Quiz 2
Jan 30 – Sed Rocks	Feb 1 – Meta Rocks	Lab 2 – Igneous Rocks	Quiz 3
Feb 6 – Geologic Time	Feb 8 - Deformation	Lab 3 – Sed & Meta	Quiz 4
		rocks	
Feb 13 – Earthquakes	Feb 15 – Ocean Floor	First lab exam	Quiz 5
February 19-23 Reading Break		No lab	No quiz
Feb 27 – Review	Mar 1 – Midterm	No lab	No quiz
Mar 6 – Plate Tectonics	Mar 8 – Mountain building	Lab 4 – Strat. Principles	Quiz 6
Mar 13 – Mass Wasting	Mar 15 – Streams	Lab 5 – Struct. Geol.	Quiz 7
Mar 20 – Groundwater	Mar 22 – Glaciation	Lab 6 – Geol. Maps	Quiz 8
Mar 27 – Wind	Mar 29 – Coasts	Second lab exam	Quiz 9
Apr 3 – Resources	Apr 5 – Exam Review	No lab	Quiz 10
Apr 10 – no class	Apr 12 – classes over		