50:460:101 – Introduction to Earth

Instructor	J.J. Naddeo	**E-mail**	jnaddeo@gmail.com
Phone	856-745-1522	**Office Hours**	"digital" office hours will take place every night between 8-9 pm during the class meeting periods, contact me directly for details
Office	BSB 410 (Lab: BSB 405-406 or 416-417)	**Final Paper Due**	June 18th 2015, 11:59 p.m.

Class "meeting" days: 5/26/2015-6/18/2015.

Text and required materials:

Essentials of Geology, 12e. You will also need to buy a code to Mastering Geology Online.

Once you have purchased the access code, you will need my course ID: **MGEOLBUBB71983**.

You need this in order to submit your homework! You will not receive a grade for this course if you do not sign up for Mastering Geology.

Statement about Online Courses:

Online courses give you additional freedoms and responsibilities that are distinct from what you may be used to in "face-to-face" or traditional classes. For some people, this works really well and is aligned with their learning styles. Others might struggle if they are not disciplined and diligent.

The schedule that is listed above is only a guide. In general, the pace and order is up to you. Homework assignments are due on given days at 11:59 pm, but they are open for one week before that and may be submitted any time up to the due date.

The course is designed to be accomplished during the work week, but once again that is simply a guideline. I am happy to "meet" by google hangouts or skype at times other than "office" hours.

Because of the compressed time-frame of the course and the need for grades to be submitted within 48 hours of the final paper due date, **absolutely no late assignments will be accepted**.

Description:

This course will introduce you to Geology and the study of Earth. It is designed primarily for General Science majors and students who need to satisfy general education requirements. The pace and volume of material have been adjusted to reflect these aims.

You are expected to read assigned material ***before*** the reading quiz starts – the specific schedule of readings is posted on Sakai. It will not be possible to cover all of the material contained

in the readings during the lectures. As such, the narrations will not serve as a substitute for the assigned reading – they are designed to probe your understanding and add new insight. If you are unprepared for the reading quizzes, it will be obvious and it will affect your grade.

Typically, a Geology class would include some field trips. However, because this course is online, we will not be able to gather as a group. Therefore, I will assign three ***virtual*** labs during the course. These assignments will constitute 20% of your grade. If you are intrepid and would rather do your activities outdoors, I will be happy to arrange this with you. **You must tell me that you would like to do this by 5/29/2015.**

The homework assigned in this course will be in the form of reading quizzes. The questions are going to be directly pertinent to the assigned chapters and should take about 30-60 minutes to complete. In aggregate, these 14 assignments will constitute 40% of your grade.

Each class day, you will be expected to contribute one discussion item relevant to the day's topic and comment on a classmate's discussion. This will take place through Sakai's Forum. You will be graded on the basis of sixteen days times 2 points per day (1 contribution/1 comment) = 32 points. This is 20% of your final grade!

Finally, you will submit a final paper about what you learned in the course on 6/18/2015 through the Assignments feature of Sakai. The paper is to be 5-8 pages, double-spaced. This is worth 20% of your grade. You must use a primary source of scientific literature in this paper. Consult with a University Librarian if you do not know what a primary source is. Just as an example, the textbook is not!

What I expect from you:

1. Read all of the assigned chapters.
2. Perform the reading quizzes.
3. Make contributions to the discussion in class. Comment on your classmate's contributions in a productive and respectful way.
4. Complete the Virtual Labs/Field Trips.
5. Write a final paper.

What you can expect from me:

1. A narrated lecture for each reading assignments
2. To be available to help you with questions
3. Equal or greater quality than a traditional 'face-to-face' course
4. Feedback on assignments

Specific Learning Objectives:

1. To understand the geologic time scale and record along with the use of dating techniques.
2. To understand plate tectonics and its causes along with the connection to convective processes in the earth's crust and volcanism.
3. To demonstrate understanding of wind and water erosion, glacier migration, and other influences that shape the lithosphere.
4. To identify basic rock-forming minerals and common igneous, sedimentary, and metamorphic rocks.
5. To identify and recognize the differences among competing scientific theories and to communicate findings, analyses, and interpretation both orally and in writing.

6. To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry.
7. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.

Grading:
1 Final Paper – 20%
Homework Assignments – 40%
Class Participation – 20%.
Virtual Labs/Field Trips – 20%

Your grade will be computed on the basis of a Gaussian distribution in which the average is a C+.

"A" – 1.15 standard deviations (STD) above the average.
"B+" – 0.68 STD above the average.
"B" – 0.34 STD above the average.
"C+" - average
"C" – 0.68 STD below the average.
"D" – 1.15 STD below the average.
"F"- anything less than 1.15 STD below the average.

Resources:

1) Sakai
2) Mastering Geology Online.

Academic Integrity:

Do not engage in any form of academic dishonesty in my class. If you do not know what academic dishonesty is, please consult this statement. I will report any violations of this policy to the campus Judicial Officer and I will fail you for the course.

Course Outline:

1 (5/26) – Welcome to Geology!

2 (5/27) - The Science of Geology (Chapter 1)

Due 5/28, 11:59 p.m. :

1) Reading Quiz 1
2) 1 Discussion Contribution and 1 Response - Chapter 1

3 (5/28) – Plate Tectonics (Chapter 2)

Due 5/29, 11:59 p.m. :

1) Reading Quiz 2
2) 1 Discussion Contribution and 1 Response - Chapter 2

4 (5/29) – Scientific Consensus and the "REAL" Scientific Method

Due 5/29, 11:59 p.m. :

1) 1 Discussion Contribution and 1 Response - Consensus, etc.

5 (6/1) – Matter and Minerals (Chapter 3)

Due 6/2, 11:59 p.m. :

1) Reading Quiz 3
2) 1 Discussion Contribution and 1 Response - Chapter 3

6 (6/2) – Igneous Rocks and Intrusive Activity (Chapter 4)

Due 6/3, 11:59 p.m. :

1) Reading Quiz 4
2) 1 Discussion Contribution and 1 Response - Chapter 4
3) Field Trip Report 1 Due

7 (6/3) – Volcanism (Chapter 5)

Due 6/4, 11:59 p.m. :

1) Reading Quiz 5
2) 1 Discussion Contribution and 1 Response - Chapter 5

8 (6/4) – Weathering and Soils (Chapter 6)

Due 6/5, 11:59 p.m. :

1) Reading Quiz 6
2) 1 Discussion Contribution and 1 Response - Chapter 6

9 (6/5) – Sedimentary Rocks (Chapter 7)

Due 6/8, 11:59 p.m. :

1) Reading Quiz 7
2) 1 Discussion Contribution and 1 Response - Chapter 7

10 (6/8) – Metamorphism (Chapter 8)

Due 6/9, 11:59 p.m. :

1) Reading Quiz 8
2) 1 Discussion Contribution and 1 Response - Chapter 8

11 (6/9) - Earthquakes and the Earth's Interior (Chapter 9)

Due 6/10, 11:59 p.m. :

1) Reading Quiz 9
2) 1 Discussion Contribution and 1 Response - Chapter 9

12 (6/10) – The Environment and Ecosystems: Shrinking the Earth to an Aquarium

Due 6/11, 11:59 p.m. :

1) 1 Discussion Contribution and 1 Response - Environment and Ecosystem
2) Field Trip Report 2 Due

13 (6/11) - Running Water (Chapter 13)

Due 6/12, 11:59 p.m. :

1) Reading Quiz 13
2) 1 Discussion Contribution and 1 Response - Chapter 13

14 (6/12) - Groundwater (Chapter 14)

Due 6/15, 11:59 p.m. :

1) Reading Quiz 14
2) 1 Discussion Contribution and 1 Response - Chapter 14

15 (6/15) - Earth's Evolution and Geological Time (Chapter 19)

Due 6/15, 11:59 p.m. :

1) Reading Quiz 19
2) 1 Discussion Contribution and 1 Response - Chapter 19

16 – 17 (6/16-6/17) – Climate Change (Chapter 20)

Due 6/17, 11:59 p.m. :

1) Reading Quiz 20
2) 1 Discussion Contribution and 1 Response - Chapter 20
3) Field Trip Report 3 Due

18 (6/18) - Special Topic: Life on Earth

Due 6/18, 11:59 p.m. :

1) 1 Discussion Contribution and 1 Response - Life on Earth
2) Final Paper