# Syllabus Geology NATS 1003 Spring 2020

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# **Class Meetings**

• Lecture MWF 11:00-11:50 Room S245

Section 01 Lab T 9:00–10:40 Room S250

• Section 02 Lab W 12:00–1:40 Room S250

# **Ed Wehling—Teaching Scientist**

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Office hours:

M 10-10:50 W 9-10:50 Th 10-10:50 F 12-12:50

I am available many other times.

You can see me to make an appointment or you can make an appointment online at

https://outlook.office365.com/owa/calendar/EdsCalendar@MinnState.edu/bookings/s/EAu52qxpFk-18JW5\_bQ8Tg2



### **Textbooks**

### **Lab manual**

- There is a required lab manual for the course.
- It is a custom-printed manual that costs about half of a typical lab manual.
- You will need to have the lab manual by the 2nd week of class.
- You must have the lab manual to do lab (after the first week).
   If you do not have the lab manual, you will not be allowed to participate in lab.

### **Lecture textbook**

- There is no required textbook for the course.
- Information about recommended optional texts is on D2L.
   In most cases, they can be obtained for less than \$20 online.
- You know yourself better than I do. If you tend to learn from books, then it
  might be a good idea for you to get a text. If you're not going to read the
  textbook if it's not required, why buy one?



### What will we do in this course?

- In this course we will explore the physical processes of Geology.
- We will talk about volcanoes, glaciers, streams, rocks, earthquakes, plate tectonics, groundwater, and more.
- We will explore questions such as:
  - o How do rocks form?
  - o What causes bends in a river?
  - O Why is Anoka county so flat?
- Along the way, we will explore the physical processes of Geology.
- We will discuss how Geology shapes the landscapes we see all around us.
- We will learn about Geology in more detail during labs.
- You will learn skills you will use the rest of your life, such as how to learn, listen, take notes, organize your thoughts, communicate effectively, seek help, and be successful.
- We will also interpret and analyze charts, graphs, maps, and tables.



# How does this course work?

#### **Lectures**

- I will describe and explain the physical processes of Geology
- I will write on the board and show images on the screen
- D2L resources
  - Syllabus
  - o Images that are used in lecture
  - o Explanations of some topics we cover
  - o Links
  - Advice from former students
  - o and more

# <u>Labs</u>

• We will look at maps and data to analyze geological processes

#### **Exams**

- There are 5 exams during the semester
- The exams are based on lecture material only

### **Assignments**

• There are required assignments throughout the semester

# **My Teaching Philosophy**

### **Students are adults**

- No games, no busy work
- Students are responsible for their success
- Students are expected to behave and not disrupt class

#### **Respect**

- I expect that we will all respect each other
- I will respect you by:
  - o starting class on time
  - o ending class on time
  - providing clear expectations about grading policies, exam dates, topic outlines, expected behavior
- I expect you to respect the rest of the class and me by:
  - Showing up to class on time
  - o Being prepared to be part of the class
  - Being attentive in class
  - Not being disruptive



# My Objectives for this course

### I want students to:

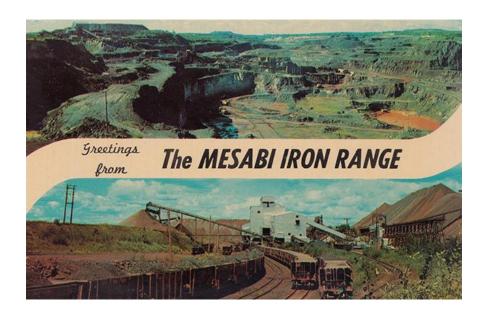
- 1. Learn and communicate about physical processes of science
- 2. Explain geological processes and analyze geological situations
- 3. Develop ways to study effectively
- 4. Develop ways to solve problems
- 5. Improve time management skills
- 6. Push yourself to stretch beyond what you can do now
- 7. Work on achieving your goals—strategies and adjustments
- 8. Be able to tell some stories about Geology
- 9. Do work beyond studying for exams



# Required activities in the course

During this semester you will participate in the following activities

- Exams
- Course plans
- Meetings with the instructor
- Labs



#### **Exams**

- Exams are based primarily on material presented in lecture
- The exams meet the following course objectives:
  - 1. Learn and communicate about physical processes of science
  - o 3. Develop ways to study effectively
  - 4. Develop ways to solve problems
  - o 5. Improve time management skills
  - 7. Work on achieving your goals—strategies and adjustments
- There are 5 exam cycles for the course. Each exam cycle consists of two exams. The first exam (A) is primarily multiple choice. The second exam (B) is primarily short answer.
- The lowest score among the first four multiple choice exams is not included in your exam average. The lowest score among the first four short answer exams is not included in your exam average.
- The last exam does count in your exam average.

### • There are no makeup exams for exams 1-4.

- The exam dates are:
  - Exam 1A Wed, Feb 5Exam 1B Fri, Feb 7
  - Exam 2A Mon, Mar 2
     Exam 2B Wed, Mar 4
  - Exam 3A Mon, Mar 30Exam 3B Wed, Apr 1
  - Exam 4A Mon, Apr 20Exam 4B Wed, Apr 22
  - Exam 5A and 5B Wed, May 13
     11:50–1:50 Room S245 (same room)

# **Course plan**

- You are required to submit a course plan twice during the semester.
- The course plans meet the following course objectives:
  - 3. Develop ways to study effectively
  - 4. Develop ways to solve problems
  - 5. Improve time management skills
  - o 6. Push yourself to stretch beyond what you can do now
  - 7. Work on achieving your goals—strategies and adjustments

### **Course Plan**

- Due by 11 PM Friday January 17
- Details in D2L Assignments

#### **Late Penalty**

- Late penalties will occur if:
  - You do not complete the assignment by the due date for the activity (see D2L).
  - You do not complete the assignment by 7 days after the due date and for every 7 days after that. That is, you will get a late penalty for every 7 days after the due date until you complete the assignment.
  - See the *Grades* section for information about how late penalties affect your grade.



# **Meeting with the instructor**

- You are required to meet with the instructor twice during the semester.
- The meetings with the instructor meet the following course objectives:
  - 3. Develop ways to study effectively
  - 4. Develop ways to solve problems
  - 5. Improve time management skills
  - o 7. Work on achieving your goals—strategies and adjustments

### **Meeting with the instructor**

- Due by 3 PM February 7
- You must have completed your Initial Course Plan before the meeting.
- Details in D2L Assignments

### **Late Penalty**

- Late penalties will occur if:
  - You do not meet with the instructor by the due date for the activity (see D2L).
  - You do not meet with the instructor by 7 days after the due date and for every 7 days after that. That is, you will get a late penalty for every 7 days after the due date until you meet with the instructor.
  - You make an appointment to meet with the instructor and do not show up for the appointment without a good excuse.
  - See the *Grades* section for information about how late penalties affect your grade.

#### Labs

- The primary objective of lab is to give you a chance to experience and learn about Geology in a low-stress, hands-on, no-lecture environment.
- Labs also meet the following course objectives:
  - o 1. Learn and communicate about physical processes of science
  - 2. Explain geological processes and analyze geological situations
  - 8. Be able to tell some stories about Geology
  - 9. Do work beyond studying for exams

### Lab attendance is required to complete the course objectives

- If you are more than 10 minutes late to lab, you will not be allowed to partici
  pate.
- You must have your lab manual (after the first week) to participate in lab. In other words, if you don't have your lab manual, you can't participate in lab.
- Be prepared to go outside each week.
- The lab usually meets for the entire 100 minutes. Plan accordingly.
- Bring a pencil, pen, and separate eraser to lab.
- There will be no required lab on Jan 28 & 29, and Feb 18 & 19.
- Labs are graded pass/fail. There are 14 labs in the semester.
   If you don't pass at least 10 labs, you will fail the course.
- Labs improve your course grade:

# of labs passed	Points added to best exam
13	15
12	12
11	8
10	3
9 or less	fail class

### **Grades**

- Your course grade is based on your exam grades.
- Labs improve your exam grades
- Late penalties reduce your exam grades

### **Exam grades**

• The grading scale for exams and for the course is:

### Lab grades

• Labs improve your course grade:

# of labs passed	Points added to best exam
13	30
12	24
11	16
10	6
9 or less	fail class

#### **Late penalties**

- Failure to complete assignments or activities on time can result in late penalties. The late penalties are described for each assignment or activity.
- Each late penalty you accrue reduces your best exam score by 30 points. [For example, if you accrue 2 late penalties during the semester, your best exam score is reduced by 60 points.]
- Late penalties begin accruing with the 2<sup>nd</sup> late activity.
   [That is, the first time that you are late you do not incur a late penalty and being late the first time will not affect your course grade.]

# **Course grades**

- To get an A in the course you must:
  - Average at least 84% on your exams (including any late penalties)
  - o Submit a Course Plan
  - o Have the Meeting with the Instructor
- To get a B in the course you must:
  - Average at least 72% on your exams (including any late penalties)
  - Submit a Course Plan
  - o Have the Meeting with the Instructor
- To get a C in the course you must:
  - Average at least 58% on your exams (including any late penalties)
  - o Submit a Course Plan
  - Have the Meeting with the Instructor



#### How to be Successful in this course

- Attend class and lab
- Pay attention in class
- Take good notes
- Write down more than what is on the board
- Do your assignments on time
- Know what is available on D2L
- Use the Topic Outlines constantly
- Read the D2L explanations
- Bring \* images to class
- Study more than a day or two before the exam
- Do more than go over your notes when you study

# **Appropriate Behavior in lecture class**

- Be courteous
- Do not socialize in the classroom
  - No talking!!
  - If this becomes a problem, you may be asked to be quiet, or asked to leave the room, or given a seat assignment
- Do not pack up early
- Be on time most of the time
  - Everyone is late once in a while
  - o If you are late, please do not be disruptive. Be courteous and quiet.
  - If you are late more than 20% of the time (excluding exams), then you may not be allowed late to lecture after that

# Other syllabus material



## **Electronics**

• No **electronics** without the instructor's permission (laptops, recorders, phones, etc.)

# **Academic Honesty**

- All students are expected to adhere to standards of academic honesty as specified in the Student Conduct Code.
- I take academic honesty issues very, very seriously.
- Cheating on exams or assignments may result in consequences as severe as failing the course.
- Violations of the Student Conduct Code can result in penalties as severe as expulsion from the college.

# **Class participation**

• In accordance with college guidelines, if you do not meaningfully participate in the class during the first two weeks, you may be dropped from the course.

# Title IX and student pregnancy

- Pregnant students have a federal right to educational access through Title IX legislation.
- If you are pregnant and issues concerning your pregnancy are interfering with your ability to access or complete your education, please contact me. We will work on a way for you to meet your goals.

### **Communication**

College Policy 2A.2 Student Email

To disseminate critical and official college notices to students in an efficient and cost-productive manner, Anoka-Ramsey Community College has designated email via the college-issued email address as the primary method of communication with students regarding topics of academic, student service or administrative nature. The college retains the right to disseminate official notices via traditional methods also.

• I may communicate with you by email during the semester. You are responsible for checking your email for communications from me.

# Last day to withdraw from the course

April 21, 2020

# **Statement for active military members:**

Military members that are currently serving should advise their instructor of all regularly schedule military training and duties that conflict with scheduled course requirements. Instructors will work with the student to address issues that arise. For further information on this, refer to MnSCU Procedure 5.12.1 Military Service and Disabled Veterans.

# **Disability Services**

If you require an accommodation for a disability please contact: Office for Students with Disabilities 763-433-1350

# **Policy 4J.1 Religious Observances**

Anoka-Ramsey Community College respects diverse religious beliefs and observances. The college will provide reasonable flexibility and accommodation when sincerely held religious beliefs conflict with requirements such as scheduling, class attendance, classroom activities, and other course or work requirements.

A student is required to inform the instructor(s) in advance if a sincerely held religious belief conflicts with course requirements.

### From the Common Course Outline

Course Title Geology

Semester Credit Value 4 Credits

Prerequisites None

### **Catalog Description**

Introduction to the physical processes that have shaped and formed the solid earth. Topics include surface processes (such as streams and glaciers) and internal processes (such as plate tectonics and volcanoes). This course is intended for non-science majors.

#### Learner Outcomes

At the conclusion of the course the student should be able to:

- 1. Understand the physical processes that create, change, and shape the surface of the earth
- 2. Understand the geological processes that occur in the earth's interior
- 3. Describe current geological phenomena in terms of geological processes
- 4. Describe the development of current geological surface structures
- 5. Understand and interpret graphical information
- 6. Obtain and analyze geological data and information
- 7. Formulate and test hypotheses of geological phenomena by performing experiments
- 8. Communicate findings, analyses, and interpretations orally and in writing
- 9. Evaluate societal issues from both an ethical and natural science perspective, ask questions about evidence presented, and make informed judgments about meteorology-related topics and policies
- 10. Work cooperatively and effectively in groups engaged in the processes of science
- 11. Describe how geologists develop, collect, and analyze data, and how they arrive at scientific conclusions

#### Meets MNTC Area 3

#### Major Areas of Course Content:

- 1. Plate Tectonics
- 2. Surface Processes
- 3. Internal Processes
- 4. Rocks and Minerals