**GEOLOGY 303 – NATURAL DISASTERS – SPRING 2020**

### **SDSU – Department of Geological Sciences**

**~Hybrid Class: Online recorded lectures – In-person exams and review sessions – In-person office hours~**



**Instructor**: Isabelle Sacramento-McJilton, Dept. Geological Sciences, GMCS building

**Email**: [isacramentogrilo@sdsu.edu](mailto:isacramentogrilo@mail.sdsu.edu) (when using email, please give your name)

**Office:** GMCS-228, Phone (619) 594 5607

**In-person Office Hours**: M 4.30-5.30; TTH 10.30–12; F select days. Or by appointment and availability (use email to set up an appointment, if you cannot make these hours). Office hours subject to change.

**Zoom Online Office Hours** (optional):TH and FRI, right before each exam

**Website:** [SDSU Blackboard site](http://blackboard.sdsu.edu)<http://blackboard.sdsu.edu>, [Geol Website:](http://www.geology.sdsu.edu/) https://geology.sdsu.edu/

**Optional Textbook**: “*Natural Disasters*” by Patrick Abbott, 10th edition (or any other), strongly recommended

### **Alternative textbooks**: “Natural Hazards and Disasters” by Hyndman/Hyndman, “Natural Hazards” by Keeler/DeVecchio, or any other Natural Disasters textbook of any edition that you find at cheaper prices.

**Online textbook:** alternative - [This](http://www.tulane.edu/~sanelson/Natural_Disasters/index.html#LectureNotes) link from Tulane University is very similar content.

**Knowing the contents of this syllabus is a class requirement.**

*This syllabus serves as a binding contract between student and instructor. By enrolling in this course you are agreeing to all terms of this syllabus. The instructor shall retain the right to adjust/change the course design.*

# I. COURSE DESCRIPTION:

* This course examines natural events that dramatically affect life on Earth. The emphasis will be upon the *geological principles* underlying natural events, such as earthquakes, tsunami, volcanoes, landslides, floods, severe weather, asteroid/comet impacts, and more. Case studies will be drawn from all over the world.
* The course involves inquiry into the scientific disciplines of geology mostly, but also some astronomy, meteorology, and oceanography to explore the dynamic interactions between human civilization and planet Earth. It is thus important to understand the interdisciplinary nature and the connections made in this course, not just the terminology, as this course builds on itself. Exam questions will reinforce this.

 You will learn which areas are susceptible to natural hazards and when these hazards become disasters. You’ll also learn practical ways to mitigate the effects of natural disasters.

* **General Education Requirement**

This course fulfills the following SDSU General Education Requirement: *IV EXPLORATIONS - Natural Sciences.*

# II. SDSU OVERARCHING STUDENT LEARNING GOALS/OUTCOMES (SLOs). After completion of this course students will be able to:

* Think logically, critically, and contextually in assessing evidence and arguments in a variety of academic settings.
* Locate, analyze, synthesize, and evaluate information, making use of appropriate technologies.
* Speak and write clearly, coherently, and effectively, adapting modes of communication to the audience.
* Explain why the “Earth system” is an integrative system across many scientific disciplines.
* Articulate how the scientific method is used to infer the causes of global-scale changes that are affecting planet Earth through time.
* Identify and describe examples of everyday observations that indicate that Earth is dynamic and ever changing, and how these observations impact our daily lives. Explain how experimentation and data analysis have led to an enhanced understanding of earth processes, and as a result, how the Earth has and will continue to impact our quality of life.

The above overarching goals are intertwined with the following course-specific content goals:

# III. CONTENT GOALS/OUTCOMES. To meet content goals students will be able to:

1. Apply critical thinking to scientific questions primarily focused on Earth system processes and their interactions with civilization.
2. Identify the mechanical attributes and chemical properties of the Earth's interior, as well as the types and sources of heat energy that drive the motion of tectonic plates that produce all of the natural events and hazards that humans face.
3. Discriminate between the different attributes of natural disasters, such as type, magnitude, frequency and recurrence interval, duration, and aerial extent.
4. Describe the nature of human population growth today and the consequent lethality of natural disasters, and ascertain the causes for each of these phenomena.
5. Analyze the origin of the solar system and of Earth and its relationship to space object impacts with the Earth. Articulate the various types of space debris that can collide with and excavate craters on the surface of our planet.
6. Convey the vastness of geologic time and key biological and physical events that have affected Earth through time, such as mass extinctions; be able to articulate how the geologic time scale was built.
7. Identify major lines of evidence for plate tectonics. Articulate the role that lithospheric tectonic plates and their movements play in shaping the Earth’s topography, including its mountain ranges and ocean basins.
8. Distinguish the three major rock groups based on their physical characteristics and modes of formation. Be able to explain and apply the concepts of the rock cycle and its relationship to the different tectonic regimes.
9. Distinguish the different types of faults and demonstrate an understanding of their origin and tectonic regime, distribution, hazards, and relationship to earthquakes, and subsequent impact on people.
10. Identify the different types of volcanoes and demonstrate an understanding of their origin and tectonic regime, distribution, hazards, and relationship to volcanic eruptions, and subsequent impact on people.
11. Analyze the genesis, tectonic implications, distribution and effects of tsunami, and subsequent impact on people.
12. Identify major types of mass wasting events, their genesis, their distribution, their subsequent impact on people, and their relationship to other natural phenomena, such as severe weather.
13. Analyze the basic principles of weather science and apply those principles to everyday experiences. Understand the nature of the present and past climate changes.
14. Predict the atmospheric conditions that give rise to severe weather, such as hurricanes, thunderstorms, tornadoes, lightning, fire, and floods. Understand the characteristics of each of these types of severe weather and their impact on people.

In order to develop these abilities, San Diego State University's General Education program, and this class, will allow you to develop and meet the following seven *Essential Capacities:*

Construct, analyze, and communicate arguments Contextualize phenomena Integrate global and local perspectives

Apply theoretical models to the real world Negotiate differences Illustrate relevance of concepts across boundaries

Evaluate consequences of actions

# IV. REQUIREMENTS AND GRADING POLICIES:

**3 Exams (at 100 points each), 2 out of 3 count 200**

**Final exam 150**

**Assignments/Quizzes through Blackboard 50**

**Total Points: 400**

**If total possible points = 400**, then 360 and above = A range; 320 and above = B range; 280 and above = C range; 240 and above = D range; below 240 = F

Straight scale: A=90-100%; B=80-89.99%; C=70-79.99%; D=60-69.99%; and F=below 60%.

[For ex, let’s say your overall total= 351 points out of 400; then multiply 351 by 100% and divide by 400 = 87.75%, or a B]

Grades within 2% of a boundary will receive + or – [For ex, let’s say that your overall total = 87.7%, this would be a B; if your total = 88%, this would be a B+. Similarly, a total of 81.6% would be a B-, and a total of 82.5 would be a B.]

Blackboard does NOT compute your final grade. It just adds up all the points that you earned in a total. At the end of term, I take that total into Excel and compute your grade out of 400 total possible points.

If you are taking the course CR/NC, and want to pass the class, you must obtain a C (72%) or higher. A 70% is still a C-, which means that your grade will be NC (a failing grade).

Incomplete: The “Incomplete” grade is *only* for unforeseen, emergency, tragic, and justified reasons at the end of the term, and only upon a contract stating conditions for completing coursework. It’s *not* given to students who aren’t doing well and/or may be failing the course. *It shall be the student's responsibility to bring pertinent information to the instructor and to reach agreement on the means by which the remaining course requirements shall be satisfied. A final grade shall be assigned when the work agreed upon has been completed. An incomplete shall be made up within 1 calendar year immediately following the end of the term in which it was assigned, or it will be counted as equivalent to an F.*

**You are the person responsible for your grade, not me**, so be aware of and adhere to the course requirements and deadlines.

Note: No extra credit given to anyone at all. No exceptions! This is work not specified on a course syllabus.

## EXAMS:

## You will have a total of 4 exams this semester: 3 semester exams and a final. All exams will be paper/pencil, in person, on campus with me. You are required to take all exams. I will take the best 2 scores out of your first 3 exams. The lowest *attempted* score will be dropped for your convenience at semester’s end. The final is not dropped. It will be *cumulative,* but will emphasize extensively the last section of the semester, which is severe weather. All exams consist of MC, matching, and TF questions. There is no essay portion to the exams.

Exam questions will be drawn very heavily from my archived lectures (almost 100%), but any material covered by homework, documentary films within lectures, and textbook readings may be included.

**Exam Protocols:**

* You are not allowed to circle or write answers, or otherwise mark or highlight them to make them evident to your neighbouring classmates.
* You are not allowed to leave the classroom for any reason during exams.
* You are not accepted into the classroom during an exam if you arrive after the first student finished.
* You are not allowed notes or textbooks of any kind during an exam.
* Grading errors, if any, must be brought to my attention within 1 week of receiving an exam/assignment score.
* Head caps: turn around; hoodies: take off. Scantrons: keep in front of you, not to the side of desk.
* We must be able to see your whole face. You must not cover your face/eyes with your hands (or anything else).
* **Expressly prohibited during tests:** mobile phones, headphones and air pods, smart watches (take off), and any other type of electronic devices, including electronic dictionaries and calculators. No exceptions.
* I do not give you “*tricky*” questions; I give you “*do you understand*” questions. I ask questions that test your comprehension of concepts, your integration of different themes of the semester, not just the regurgitation of facts. It’s important, therefore, to apply yourself every day and early on.Cramming for a test does not work.

**Please note:** Exams CANNOT be made up. I do not make any exceptions to this at all, in this large class. If I were to do it for one student, then I would have to open that exception for all other students, for whatever their reasons, and whatever test. This is impossible. Plan straight away on taking ALL exams.

 **Very important note about dropping a test:** a **penalty of 20%** will be added to your next test if you choose to miss a test without a valid reason. What’s a valid reason? -- an event of an unforeseen, tragic, extraordinary, and, most importantly, *documentable* nature. Documents include hospital discharge papers (a “doctor’s note” is insufficient) or a police report for a severe and very tragic accident.

**Note about watching lectures:** If you miss a test, keep in mind that you’re still required to know the material in it, so you still have to watch those lectures. This is for purposes of both the homework report and the final exam.

*Missing an exam with reasons like but not exhaustive of “tragic situation”, “family emergency”, ”emergency surgery”, ”oversleeping”, “my dog ate my notes”, or any type of “work schedules, airline conflicts, traffic accidents, sick parents, sick roommates, sick pets, dead uncles or dead friends or dead grandmothers”, or “aunts who committed suicide but whose bodies haven’t been found yet”, or “grandpas who got sick and the funeral is on Friday”, etc, shall not be accepted.*

SDSU Class Conflicts: If the exams conflict with a *scheduled class* that you have this semester at SDSU, meaning, at the same times, then you need to let me know *immediately* – I’ll work with you. You have the first 2 weeks of the semester to notify me. This (other SDSU classes) is one of the few exceptions that I’ll allow in terms of made-up exams, and only by the contact deadline above.

Any questions about these policies, please don’t hesitate in contacting me.

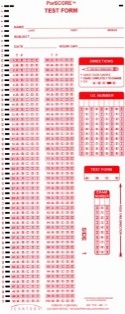
**Exam schedule:** You’ll need to immediately set aside these times for your exams. The midterm exams are scheduled for **Fridays between 4 and 530 PM in ENS-280 (classroom may change)**. Please check the last page for this complete schedule. Your exams are 1 hour and 15 minutes, with the additional 15 minutes dedicated to a brief review, before each exam (so, total 1hr30 min).

EXAM 1 – Friday, 21 Feb (covers Geology intro topics, population, impacts, extinctions)

EXAM 2 – Friday, 20 Mar (covers plate tectonics, earthquakes, and tsunami)

EXAM 3 – Friday, 24 Apr (covers volcanoes, mass wasting)

EXAM 4 – Final Exam, between 8-14 May (TBD by Univ) (covers mostly weather and climate)

**Scantrons (for exams only)**: You must bring the small red scantron form Parscore F-289 and a #2 mechanical pencil, with a good eraser. You will not be admitted to the tests without this scantron.

Note: You must **erase** your scantron answers completely, when appropriate. You must also fill in the Test Form box. Failure to do any of this will result in lower scores, or no score, because the scanning computer is not able to make out your answers or match them to my key. *Mechanical pencils* work best for this.

Your scantron must also be new and totally flat, so the computer can read it.

## ARCHIVED LECTURES:

* **Archived (recorded) lectures**: These are absolutely required in this course. My lectures are recorded using TechSmith Relay, a software program that allows media-rich learning sessions. They will be posted for viewing in Blackboard on the left panel under “Archived Lectures”. I will cover the material exactly like I would in an in-person lecture. Unfortunately, there is no interaction between you and me during these sessions, but you can always do that within the class discussions outlined below. There will be from 7 to 11 recorded lectures per course section (4 course sections). *This is the same length and same material as it would be for an in-person class.*
* You should be listening to the lectures at least 3 times per week. Don’t wait till last minute, before a test, to get caught up. This is an upper division science course that requires critical *thinking and a fair amount of studying time.* Cramming for a test will not work. Furthermore, you may fail this course if you choose not to listen to these lectures.
* **Note Taking:** Taking notes from the archived lectures is critical. Listen carefully to the archived lectures at a steady pace and take copious notes on them. Exam questions come almost 100 % straight from these lectures.
  + **Slides Posted (if applicable):** Under “Course Documents” in Bb you may find the most important image files posted for most topics throughout the term. These are *optional* but will complement your note-taking. You still must watch the mandatory recorded lectures.
* **Note on *Quizlets*:** don’t rely on these as a source of external material in this class. They are often wrong and misleading, and may result in your performance in the course suffering as a result.

## BLACKBOARD ASSIGNMENTS:

* This will consist of a short written assignment to be submitted directly in Bb *Turnitin.* It will be a short question and answer format paper or report. You’ll find the *Turnitin* button on the left panel when I post it, and it will have detailed directions. Follow those directions very closely and make sure you submit before the deadline. This assignment, which is part of the University-mandated writing requirement, will promote the achievement of your learning outcomes stated in the beginning.

**Topics**: This assignment will incorporate material for exams 2 and 3, meaning, Plate Tectonics, Earthquakes, Volcanoes, Tsunamis, and Landslides.

* If there are any online quizzes, they will be clearly posted and announced. Follow directions on this as well (amongst them, don’t refresh/resize the window, don’t preview a quiz, don’t print a quiz).
* To this extent, be sure to pay attention to the **Announcements** section in Blackboard and my respective email to you. Homework will be posted in the folder **Assignments**.
* Due: Due dates will be clearly announced for homework. Don’t miss deadlines. You’ll have ample time.

**Homework Protocols:** Please Read:

* To get credit, you must submit all assignments electronically **exactly as stated in the directions**.
* **No late homework shall be accepted.** You cannot complete homework after the due date (it will not be available to you online). Personal computer problems are not valid excuses for missing any deadlines. There will be no make-ups. This is to be fair to all other students who submit on time.
* An exclamation mark (!) next to your written assignment means that you did turn in it, but I haven’t gotten to grading it yet. Grading will take me and my TA 2-3 weeks or more.

# V. ONLINE REVIEW SESSIONS, OFFICE HOURS, DISCUSSION BOARD – all optional:

* **ZOOM Web Conferencing - Online Class Sessions:** This is a tool that allows live interaction among the class participants, very much like Skype (e.g., you can ask questions via a chat box or headset microphone and I answer). I will hold optional, not required, online class discussions in order to meet your needs if you have any questions at all about the course policies or course material.
* There are no course points associated with this. Similarly, you don’t lose any points if you don’t participate. I strongly encourage you to enter the class discussions. They are in addition to the office hours.
* Please come prepared with questions before you enter the session. You must also turn your microphone off.
* I welcome all your questions. Don’t hesitate in participating and having your questions answered.

**What you’ll need to connect with me via Zoom:** Meeting link <https://SDSU.zoom.us/j/615426914>

Go to the button *ZOOM Sessions* in Bb. Link will install Zoom, which takes about 10 seconds. When prompted to launch application, just press OK. Join from PC, Mac, Linux, iOS or Android. The video in Zoom will start immediately by default (so, be prepared to have a video of you seen online right away). Once in the session, you can turn it off.

**Schedule of live discussions:** TH 8-9 PM day before exams, FRI day of exams tentatively at 130-2 PM (this is subject to change). Final exam Zoom will be one session and is on the day of final. Check the exam schedule.

Access Zoom Support 24/7: [Support.zoom.us](http://Support.zoom.us)

SDSU’s Web Conferencing Resources Page [its.sdsu.edu/web-conferencing/](http://its.sdsu.edu/web-conferencing/)

* **Discussion Board in Bb:** This is strongly encouraged **-** here you can also interact with your classmates, ask and answer questions about anything pertaining to the course, post any current event, request study groups, etc. This can be discussion of any homework, exams, or anything else. Take advantage of it as it may help you get answers to your questions and be a better student, especially in an online format. Find it on the left panel in Bb.
* **In-Person Office Hours:** I also strongly encourage you to come to my office hours to get clarification on anything at all. You may also see your exams and understand your scores. This will prepare you for the exams, as well as allow you to better understand the concepts and be a better student.
* **Even if you cannot make office hours, please contact me.** I’m in my office most days and you can come see me when it’s convenient to you, particularly on test days.
* **Come see me!** If you think that you are not doing well in class, please ensure that you contact me *early* on in the term. I will do my best to help you succeed in this class. It is my goal that you learn the concepts and earn the grade that you’d like. Discussing your grade as late as when the term ends is not really an option.

Furthermore, I shall not change any grade, including a failing grade, if you indeed fail the class, or earn a grade that you don’t like, or must get in some program or major.

**[**You can always contact SDSU Library for support services, such as the Tutoring Center <http://library.sdsu.edu/>**]**

# VI. LINKS:

The following links may help you with this class. (Note that not everything in them pertains to our class):

1. This: http://www.tulane.edu/~sanelson/Natural\_Disasters/index.html#LectureNotes is the [website of a similar class from Tulane University](http://www.tulane.edu/~sanelson/Natural_Disasters/index.html#LectureNotes). Scroll down to the table of lecture notes for each individual chapter and open the links. This can replace a textbook.
2. This: https://www.youtube.com/c/GeoScienceVideos is a [YouTube channel with very cool videos on a lot of Geology topics that we cover](https://www.youtube.com/c/GeoScienceVideos).

# VII. WHEN SHOULD YOU EMAIL ME?

* NOT when you have a content question, that is, about the material in this class. If you do, then I’ll simply request that you attend the Zoom discussions, come see me in my office hours, or – better yet – post it in the Discussion Board, so that everyone reads the answer.
* However, if there is a problem with Bb (e.g., link not working – very rare), or you have any other concern or question, like from what country I am to have this outrageous accent, please do email me through the “Email” menu link or [here](mailto:isacramentogrilo@sdsu.edu). Your email subject line must include “Geol 303”. I will respond as soon as I can, within 24 hours usually (excluding weekends).

# VIII. ACADEMIC AND NON-ACADEMIC MISCONDUCT:

Plagiarizing, cheating, unauthorized collaboration on course work, stealing examination materials, falsifying records or data, and obstruction or disruption of the educational or administrative process, amongst others, constitute violations relative to Title 5, California Code of Regulations. I will report it to the Center for Student Rights and Responsibilities for further action. The consequences for cheating are always serious and may result in your failing the course and/or expulsion from the University.

**Note on Plagiarism**: 

Plagiarism is a form of cheating. Always make sure your work is original. An instructor must be able to gauge what the student has learned. Therefore, copying the work of another person on any assessment, whatever that might be (report, test, online quiz), either online or offline, is considered cheating.

Examples of academic dishonesty include but are not limited to:  
*Cheating:    Copying from another student or using unauthorized aids during any type of assessment.  
Plagiarizing:    Copying someone else’s work or ideas and misrepresenting them as one’s own. Falsification:     Making up fictitious information and presenting it as real or altering records.  
Facilitation:    Helping another student to cheat, plagiarize, or falsify.*

**IX. TECHNICAL COMPETENCIES NECESSARY FOR COURSE COMPLETION**:

* **EMAIL**: You must **have constant access to your Email.** Otherwise, you’ll miss important announcements in Blackboard, and may miss homework deadlines. Please check Blackboard frequently.
* **INTERNET:** You must have **good, reliable high speed Internet connection. Use Firefox, Chrome, or Safari as your browser, not Explorer.** Your own Wi-Fi may not be reliable.
* **BLACKBOARD**: You must be able to navigate through our Learning Management System - **Blackboard**, as well as be able to upload or download files in Blackboard Turnitin. Most of you are OK with all this.

Link for SDSU [Instructional Technology Services](http://its.sdsu.edu/blackboard/student/index.html) (ITS) department (619) 594-3189, which deals with Blackboard, is <http://its.sdsu.edu/blackboard/student/index.html>

Please take this online readiness survey to see if this is your fit: [CSU Stanislaus Online Readiness Self-Assessment](http://teachonline.csustan.edu/selfassessment.php): <http://teachonline.csustan.edu/selfassessment.php>

**In order to submit homework in Blackboard successfully:**

* DO NOT use your phone/tablet to submit a quiz or any assignment. Use only a reliable computer.
* DO NOT wait till last minute: Blackboard may not have time to process and accept your work.
* Finally, I strongly suggest that you use the **computer labs** in the university, rather than your personal computer. ***Loss of a grade due to personal computer problems is not fixed or cleared by the instructor.*** This usually includes slow or intermittent personal internet connections.

# X. UNIVERSITY POLICY:

**Students with Disabilities:** I want you to succeed in my class. If you are a student with a disability, and will need accommodations for this class, it is your responsibility to contact ASAP the test proctoring center at (619) 594-2643 ([tac.sasc@sdsu.edu](mailto:tac.sasc@sdsu.edu)), and to contact me *within the first 2 weeks of term*. Please note that accommodations are not retroactive, and cannot be provided until you have presented your instructor with an accommodation letter from SASC. Their website is <http://go.sdsu.edu/student_affairs/sds/>. If this applies to you, please schedule your exams early, and take all exams in the testing center, not with the class (I will not have a test for you if you come to the classroom).

Note that it may take a while for you to get your test grade (relative to the rest of the class).

**Religious observances:** By the end of the 1st week of the term, students should notify the instructors of planned absences for religious observances. Instructors shall reasonably accommodate students who notify them *in advance* of a planned absence. Please notify me by the end of the *1st week of classes* if you plan to be absent for a scheduled test.

Important date:

5 Feb – last day to drop without a “W”; Last day to add.

If you stop attending and don’t drop, your grade will be UW, which is equivalent to “F”.

Schedule in next pages

***CLASS SCHEDULE***

**Note that the following lecture schedule is tentative and *subject to change*. You will be notified if need be. You are responsible for noting all changes and adhering to them.**

**You should listen to the lectures as listed below (not wait till exam time, not choosing Quizlets instead).**

All midterm exams are 1hr15m and require red *Parscore* Scantron F289, N2 mechanical pencil, good eraser

**WEEK OF**  **Readings in Abbott’s textbook, 10 Ed**

Week 1: Jan 22 – Introduction to the course

Characteristics of Natural Disasters Chapt. 1

Week 2: Jan 27 – Population Growth, Energy Sources of the Earth Chapt. 1, 2

Week 3: Feb 3 – Introduction to Geology; Earth: Make-up, Structure Chapt 2

Feb 4 – 1st homework assignment due at or around this date

Week 4: Feb 10 **–** Impacts with Space Objects Chapt. 17

Mass Extinctions

Week 5: Feb 17 – Mass Extinctions Epilogue

***Friday, Feb 21*** – ***EXAM 1*** (chapters 1, 2, 17, and all lecture notes)

(Covers Geology intro topics, population, impacts, extinctions)

Week 6: Feb 24 – Plate Tectonics: Plate boundaries Chapt. 2

Week 7: Mar 2 – Tectonics and Earthquakes Chapt. 3, 4, 5

Week 8: Mar 9 – Tectonics and Tsunami Chapt. 8

Week 9: Mar 16 **–** Historical Earthquakes Chapt. 3, 4, 5

***Friday – Mar 20* – *EXAM 2*** (chapters 2, 3, 4, 5, 8, and all lecture notes) –

(Covers plate tectonics, earthquakes, tsunami)

Week 10: Mar 23 – Tectonics and Volcanoes Chapt. 6, 7

**30 Mar – 3 April: Spring Break**

Week 11: Apr 6 – Historical Volcanoes Chapt. 6, 7

Week 12: Apr 13 – Mass Wasting (Landslides) Chapt. 15

Week 13: Apr 20– Historical Mass Wasting Chapt. 15

Apr 24– 2nd homework assignment (Tectonic report) due at or around this date

***Friday – Apr 24 –******EXAM 3*** (chapters 6, 7, 15, and all lecture notes) –

(Covers volcanoes, mass wasting)

Week 14: Apr 27 – Weather Principles, Wildfires, Climate Change Chapt. 9, 12, 14

Week 15: May 4 – Severe Weather: Hurricanes, Coastal Erosion Chapt. 11, 16

Severe Weather: Thunderstorms, Lightning, Tornadoes, Floods Chapt. 10, 13

Last day of classes: TH, May 7.

Week 16: Finals

***FINAL EXAM: TBD by University*** – Between 8-14 May – Finals week. Covers mostly weather, severe weather, climate change. The Final is cumulative but a very large portion of it will be the last section of semester – Weather/Climate (Chapters 9, 10, 11, 12, 13, 16). You’ll have 2 hours.

**NOTE on the Final:** The final exam schedule will be set by the University (takes about 1 month to schedule). You’ll be notified as soon as I get a date.

**Finals week is****Friday****8 May - Thursday 14 May.** Our final will be *within* this time frame. It can easily fall on Saturday or Sunday of finals week, or even on the last day of finals.

If you have travel or other plans (or any others), see to it that they take place ***after*** this time frame. The final cannot be re-scheduled. The final cannot be made up. The final cannot be dropped.There are no exceptions made.

**Any questions?** Please don’t hesitate to ask me.

