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.

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, and asteroid/comet impacts. Case studies will be drawn from all over the world.

- The course involves inquiry into the scientific disciplines of geology mostly, but also astronomy, meteorology, and oceanography to explore the dynamic interactions between human civilization and planet Earth. It is also important to understand the interdisciplinary nature of this course, not just the terminology. Exam questions will reinforce this.

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

II. OVERARCHING GOALS/OUTCOMES. After completion of this course students will be able to:

1. Think logically, critically, and contextually in assessing evidence and arguments in a variety of academic settings.
2. Locate, analyze, synthesize, and evaluate information, making use of appropriate technologies.
3. Speak and write clearly, coherently, and effectively, adapting modes of communication to the audience.

Through the successful completion of the course, students will be able to:

- 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 lead 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 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. Identify the scientific principles and analytical tools used by earth scientists in developing and scrutinizing theories on the Earth's evolution.
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 and 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, aerial extent, and speed of onset.

4. Describe the nature of human population growth and the consequent lethality of natural disasters, and ascertain the causes for each of these phenomena.

5. Understand 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. 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 if the rock cycle and its relationship to the different tectonic regimes.

9. Identify 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.

13. Analyse 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.

IV. REQUIREMENTS AND GRADING:

| 3 Exams (at 100 points each), 2 out of 3 count | 200 |
| Final exam | 150 |
| Set of Assignments/Quizzes through Blackboard | 100 |
| **Total Points:** | **450** |

If total points = 450, then 405 and above = A; 360 and above = B; 315 and above = C; 270 and above = D; below 270 = F

Straight scale: A=90-100%; B=80-89%; C=70-79%; D=60-69%; F=below 60%.

[For ex, let’s say your totals= 349 points out of 450; then multiply 349 by 100% and divide by 450 = 77.6%, or a C]

Grades within 2% of a boundary will receive + or –

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** consist mostly of MC, matching, and TF questions. The lowest or missed exam score will be dropped for your convenience. The **final exam** is not dropped. It will be *cumulative*, but will emphasize the last section of the semester, which is severe weather.

Exam questions will be drawn very heavily from the lectures and class discussions, but any material covered by online quizzes and exercises, documentary films, and textbook readings may be included.

- I do not give you “tricky” questions; I give you “do you understand” questions. I ask questions that test your comprehension of concepts, not just the regurgitation of facts. It’s important, therefore, to apply yourself **everyday and early on**. This is an upper division science course that requires critical **thinking and a fair amount of studying time**. Cramming for a test does not work!
**Please note:** Exams will not be re-scheduled for your personal convenience. Exams may be re-scheduled by me as the progression of the course determines. **Exams CANNOT be made up. If you plan to miss an exam, then that is the exam that you will drop.** I do not make any exceptions to this at all. Plan straightaway on taking ALL exams.

**Please note again:** Missing an exam with excuses like but not exhaustive of “forgetting about the exam”, “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 grandmothers”, or “aunts who committed suicide but whose bodies haven’ been found yet”, etc, will not be tolerated. This is the exam that you drop.

- You will not be allowed to leave the classroom for any reason during exams.
- You will not be accepted into the classroom during an exam if you arrive after the first student finished.

- Grading errors or questions, if any, must be brought to my attention within 1 week of receiving an exam/assignment score.

- I encourage everyone to come to my office hours to see your exams and understand your scores. This will prepare you for the final exam as well as allow you to better understand the concepts.

**SCANTRONS:** You must bring the large red scantron form Parscore F-288 (enrollment form) for the first exam only. Thereafter, you will need the smaller red scantron form Parscore F-289. You must bring a #2 pencil for exams.

*Note:* You must fill in and darken your scantron answers completely. 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.

**BLACKBOARD ASSIGNMENTS** are part of the University-mandated writing requirement. There will be from 8 to 10 assignments as homework all totaling 100 points. This means that you will have 2 or more assignments between exams.

- To this extent, be sure to pay attention to the **Announcements** section in Blackboard or my announcements in class, or both, and make sure that you meet the due dates for all the online work. There are NO exceptions made for late submittals.

- This homework may include quizzes and short written essays and exercises. To get credit, you must submit assignments electronically or in person exactly as stated in the directions. Please read and follow the instructions stated on each assignment.

- ALL online quizzes and assignments will be made available in the Assignments folder and will be based on the lecture discussions and chapter readings. It’s your responsibility to check this folder regularly (every week) for homework, not mine to remind you of it!

- All assignments will be open for a limited time frame from 1 to 2 weeks and will range in value from 5 to 15 points each. There will be from 4 to 6 quizzes during the semester. Quizzes are not timed but you must complete them the first time you open them. Note: Leaving your quiz unattended will cancel all your work. **Off line exercises** – there will be 1 or 2 short in-class or take-home exercises, which are part of the 100 point total.

**NOTE:** You cannot complete or turn in ANY assignment after the due date, or after you lock it up (it will not be available to you online). **No late assignments will be accepted at all. There will be no make-up of ANY online assignments, no matter what your reasons are. No special arrangements will be made (even if you add the course late or miss the first class meetings). No quiz/assignment score will be dropped.**
PLEASE ALSO NOTE: Personal computer or printer problems are not valid excuses for missing homework deadlines. Please do NOT take quizzes on your phone as it may not go through and you’ll lose those points.
- No assignments submitted through personal email will be accepted.
- No assignments submitted through the Blackboard feature “Digital Dropbox” will be accepted.
- If you wait till the last minute (meaning: 1 day before it’s due) to submit an assignment and run into problems, there will be nothing that I will do to help you.
- An exclamation mark (!) next to your assignment means that you DID turn it in, but I haven’t gotten to grading it yet. Note: Grading will take me up to 2 weeks.
- A “Paper&pencil” symbol on assignments/quizzes means that you haven’t correctly completed and submitted them. This will result in a 0 score.

In ‘View Grades”, the row called “Total” under “Points Possible”: you’ll see something other than 450 points. Just ignore it. Bb does not compute your grade, I do. Bb just adds all the points earned.

V. CLASSROOM CONDUCT:

- **Attendance:** is mandatory and is expected. You must be present and on time for all class sessions. Attendance is found to be directly proportional with overall grade quality. Please do not miss class!

- If you miss classes, it is your responsibility to get notes from a fellow student and not to fall behind. I will not provide notes personally or electronically outside of class time.

- **If you think that you are not doing well in class,** please ensure that you contact me early on in the semester. 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 semester ends is not really an option.**

- **Note Taking:** Diligently taking notes and being attentive during class shows you are serious about your education. Notes are critical. They provide the foundation of what is discussed and the basis for all exams.

- **Participation:** Questions about anything discussed in class should be asked in class (preferred), or during office hours. Participation is strongly encouraged. I welcome all your questions.

- **Length of class time:** This is a 50 min. lecture, not a 45 min. lecture. If you start leaving class ahead of time, then the whole class will be penalized and 10 points will be deducted from everyone’s totals.

- **Lateness to class:** This is disruptive to lecture and is never appreciated by me or by the students. Don’t do it!

- **Do not** engage in side conversations with your friends. This is disruptive and distracting to other students.

- **THE FOLLOWING IS NOT TOLERATED DURING CLASS TIME:** using your mobile phone for ANY purpose at all (this includes texting), using cameras, ipods, headphones, reading newspapers/magazines/books, studying for other classes, or sleeping and snoring.

- You are also NOT allowed your laptop during lecture.

- **NOTE:** Handling a mobile phone, as well as ANY other type of electronic devices, including electronic dictionaries and calculators, is expressly prohibited during exams. No exceptions!

Anyone caught will fail a test or the course and further disciplinary action will be pursued.

**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, physical abuse or threat of such an abuse, theft, sexual, religious, or racial harassment, possession of controlled substances or weapons constitute violations relative to Title 5, California Code of Regulations. Violations will be documented in writing with the upper division supervisor, and University disciplinary action will be pursued. This can include failing the course 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, online or offline, whether an essay, test, take-home quiz, or online quiz, 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 (without acknowledgement or permission).

*Falsification:* Making up fictitious information and presenting it as real, or altering records for the purpose of misrepresentation.

*Facilitation:* Helping another student to cheat, plagiarize, or falsify.

**VI. IMPORTANT DATES**

3 Feb – last day to add.

1 Feb – last day to drop without a “W”. If you stop attending and don’t drop, your grade will be an “F”

If you are taking the course CR/NC, and want to pass the class, you must obtain a C (72%) or above.

**Persons with Disabilities:**

The department will make reasonable accommodations for persons with documented disabilities. Instructors must receive a verification letter within the first week of class. Please check with SDS (Student Disability Services).

**VII. HOW TO AVOID ONLINE QUIZ PROBLEMS** (or, how to avoid getting a 0 for your quiz!...). This is modified from the SDSU ITS Blackboard support website:

- Use Firefox or Safari, not Explorer, as your browser. DO NOT use your phone to submit a quiz. DO NOT wait till last minute: Blackboard may not take your quiz.
  - Blackboard Quizzes Should NOT Be Saved in Progress
    You should not use any Save buttons during a quiz. Complete a quiz on the first attempt and then press Submit.

- Browser Windows Should NOT Be Resized or Refreshed During a Quiz
  If you resize the window, the quiz will stop and no score will be recorded. In the Blackboard Gradebook you will receive an "Incomplete Attempt" message. Do not resize or refresh the browser.

- You May NOT Preview a Quiz
  You should not take or "preview" the quiz until you are actually ready to take it. If you "preview" the quiz or begin taking the quiz and then log out, Blackboard will not let you back in. You will receive a "Sorry… you already took this assessment on (date) and (time)" message.

- The “paper&pencil” Symbol
  If you have this symbol on your grade sheet for a particular assignment, this means you did not complete it correctly.
  This type of error will NOT be corrected!

- You may NOT Print a Quiz
  If you print a quiz then leave Blackboard without actually answering any questions, the system will consider the quiz taken. Blackboard considers that a quiz has been attempted every time it is entered, regardless if any questions have been answered. You will not be able to re-take the quiz. You can, however, print your scores afterwards.

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.**
TENTATIVE CLASS SCHEDULE

Note that the following lecture and exam schedule is subject to change depending upon the progression of the course. You will be notified online and in class. You are responsible for noting all changes and adhering to them.

Note: 2 or more Bb assignments or quizzes are due between exams

<table>
<thead>
<tr>
<th>WEEK OF</th>
<th>Readings in Abbott's textbook, 8Ed</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 Jan – Introduction to the course</td>
<td>Chapt. 1, 2</td>
</tr>
<tr>
<td></td>
<td>Introduction to Geology, Origin/Structure of the Earth</td>
</tr>
<tr>
<td>24 Jan – Energy Sources of the Earth. Population Growth</td>
<td>Chapt. 1, 2</td>
</tr>
<tr>
<td>31 Jan – Characteristics of Natural Disasters</td>
<td>Chapt 1</td>
</tr>
<tr>
<td>7 Feb – Impacts with space objects.</td>
<td>Chapt. 17</td>
</tr>
<tr>
<td>14 Feb – Mass Extinctions</td>
<td>Chapt. 16</td>
</tr>
<tr>
<td><strong>Wed, 16 Feb – EXAM 1 (on or around this date)</strong> - (chapters 1, 2, 16, 17, and lecture notes) – Scantron F288</td>
<td></td>
</tr>
<tr>
<td>21 Feb – Plate Tectonics: Sea floor spreading, Plate boundaries</td>
<td>Chapt. 3</td>
</tr>
<tr>
<td>28 Feb – Earthquakes and Tectonics</td>
<td>Chapt. 4, 5, 6</td>
</tr>
<tr>
<td>7 Mar – Tsunami and Tectonics</td>
<td>Chapt. 5</td>
</tr>
<tr>
<td>14 Mar – Historical Earthquakes</td>
<td>Chapt. 4, 5, 6, 7</td>
</tr>
<tr>
<td><strong>Mon – 21 Mar – EXAM 2 (on or around this date)</strong> - (chapters 3, 4, 5, 6, 7 and lecture notes) – Scantron F289</td>
<td></td>
</tr>
<tr>
<td>Volcanoes and Tectonics</td>
<td>Chapt. 8</td>
</tr>
<tr>
<td><strong>28 Mar – 1 April – Spring Break!</strong></td>
<td></td>
</tr>
<tr>
<td>4 Apr – Historical Volcanoes</td>
<td>Chapt. 9</td>
</tr>
<tr>
<td>11 Apr – Mass Wasting (Landslides)</td>
<td>Chapt. 10</td>
</tr>
<tr>
<td>18 Apr – Historical Mass Wasting.</td>
<td>Chapt. 10</td>
</tr>
<tr>
<td><strong>Fri – 22 Apr – EXAM 3 (on or around this date)</strong> - (chapters 8, 9, 10, and lecture notes) – Scantron F289</td>
<td></td>
</tr>
<tr>
<td>25 Apr – Weather Principles</td>
<td>Chapt. 11, 12, 15</td>
</tr>
<tr>
<td>2 May – Severe Weather: Hurricanes, Coastal Erosion</td>
<td>Chapt. 13</td>
</tr>
<tr>
<td>9 May – Severe Weather: Thunderstorms, Lightning, Tornadoes, Floods</td>
<td>Chapt. 12, 14</td>
</tr>
<tr>
<td><strong>Last day of classes:</strong> Tues, 10 May.</td>
<td></td>
</tr>
<tr>
<td><strong>FINAL EXAM:</strong> 9 am class – Wednesday, 18 May at 8 am. – Same room (note the time change)</td>
<td></td>
</tr>
<tr>
<td>1 pm class – Friday, 13 May at 10.30 am. – Same room (note the time change)</td>
<td></td>
</tr>
</tbody>
</table>

The Final is cumulative but a large portion of it will be the last section of semester – Weather/Climate. These are Chapters 11, 12 13, 14, 15. Red Scantron F289. There will be 100 questions. The final is a significant portion of your grade.

**NOTE:** The final exam schedule is set by the University. The final cannot be re-scheduled! The final cannot be made up! The final cannot be dropped!