<table>
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<th>DATE</th>
<th>SUBJECT</th>
<th>LABORATORY</th>
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<tr>
<td>Jan. 12</td>
<td>The Dynamic Earth and Geological Time Scale</td>
<td>NO LAB</td>
<td>Bolt pp. 28 - 39</td>
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<td>THIS WEEK</td>
<td>Bolt Appendix D</td>
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<td>Jan. 14</td>
<td>Where Earthquakes Occur and Why -- Plate Tectonics</td>
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<td>Jan. 19</td>
<td>Plate Tectonics - The Evidence</td>
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<td>Jan. 21</td>
<td>Plate Tectonics - The Mechanism Sea-Floor Spreading</td>
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<td>Jan. 26</td>
<td>Faults and Stress in the Earth</td>
<td>Lab Orientation/Plate Boundaries</td>
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<td>Jan. 28</td>
<td>Earthquake Source Mechanisms from Seismic Observations</td>
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<td>Feb. 2</td>
<td>Tectonics of Western North America</td>
<td>Paleomagnetism and Plate Tectonics</td>
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<td>Feb. 4</td>
<td>Evolution of the San Andreas Fault System</td>
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<td>Feb. 9</td>
<td>Earthquakes, Volcanoes and Tsunamis</td>
<td>Stress and Faulting</td>
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<td>Feb. 11</td>
<td>Nature of Seismic Waves</td>
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<td>Feb. 16</td>
<td>Reflection and Refraction of Seismic Waves</td>
<td>Fault Plane Solutions</td>
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<td>Feb. 18</td>
<td>Using Seismic Waves to Study the Earth’s Interior</td>
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<td>Feb. 23</td>
<td>MIDTERM I</td>
<td>California Faults</td>
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<td>Feb. 25</td>
<td>Interpreting Seismograms</td>
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<td>March 1</td>
<td>Monitoring Earthquakes and Seismic Instruments</td>
<td>Reflection and Refraction of Waves (Part 1)</td>
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<td>March 3</td>
<td>Locating Earthquakes</td>
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<td>March 8</td>
<td>Measuring the Size of Earthquakes</td>
<td>Reflection and Refraction of Waves (Part 2)</td>
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<td>March 10</td>
<td>Foreshocks, Mainshocks, Aftershocks, and Earthquake Swarms</td>
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<td>MARCH 14 – 18</td>
<td>SPRING BREAK</td>
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<td>March 22</td>
<td>Earthquake Statistics</td>
<td>Seismic Phases and Ray Paths in the Earth’s Interior</td>
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<td>March 24</td>
<td>Moonquakes -Other Tectonic Styles in the Solar System</td>
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<td>March 29</td>
<td>Important Earthquakes I Case Studies</td>
<td>Locating Earthquakes and Estimating their Intensity</td>
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<td>March 31</td>
<td>Important Earthquakes II Case Studies</td>
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<td>April 5</td>
<td>MIDTERM II</td>
<td>Magnitude and Energy of Earthquakes</td>
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<td>April 7</td>
<td>The Earthquake Source How the Earth Fractures</td>
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<td>April 12</td>
<td>Earthquake Prediction I</td>
<td>Paleoseismicity</td>
<td>Bolt Ch. 10</td>
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<td>April 14</td>
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<td>Earthquake Resistant Design</td>
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<td>April 26</td>
<td>Personal Safety before, during, and after an earthquake</td>
<td>Review for Final</td>
<td>Bolt Ch. 11</td>
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<td>April 28</td>
<td>Course Summary</td>
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GEOLOGY 240 LXG EARTHQUAKES  
SPRING 2016  
SAMMIS

Required Text: Bolt. *Earthquakes: 2006 Centennial Update (1906 Big One)*

Midterms: Feb. 23 and April 5.

Final: May 10 11 am - 1 pm (as per University schedule)

Lab Breakdown:
- Best 10 Exercises ............. 100 pts. (10 pts. each)
- Best 10 Quizzes ............... 150 pts. (15 pts. each)

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250 pts. total possible

Course Breakdown:
- Lab ........................... 250 pts.
- Class Quizzes .............. 25 pts
- Midterm I ..................... 125 pts.
- Midterm II .................... 125 pts
- Final .......................... 250 pts.

Maximum achievable score ........ 775 pts.

Grading on a curve

Guarantees:
- 90%-100% = A
- 80%-90% = B
- 70%-80% = C
- 60%-70% = D

Professor: Charles G. Sammis ZHS 107 sammis@usc.edu

Office Hours directly following class on Tuesday and Thursday or by appointment.