Instructor: Maria Sider  
Office Hours: PC 324B (by appointment only)  
Email: msider@fiu.edu, (Please allow time for a response and please expect emails received after 8 PM to be answered the following day.)

Course Description:
This laboratory course provides a basic survey of Earth Science including earth materials, surface and internal processes, earth history, oceanography and atmospheric science. This course is a combined section of ESC 1000L and GLY1010L serving as the complementary laboratory sections for ESC 1000 and GLY 1010.

Course Objectives
Students should leave this course with a solid appreciation of the Earth sciences and their impact on societal issues such as natural hazards and mineral and energy resources.

Learning Outcomes
After completing this course, students should be able to apply their knowledge of Earth science to 1) apply scientific principles and theories to problem solving; 2) test scientific hypothesis by applying the scientific method; 3) evaluate scientific statements and graphics; and 4) interpret new information within the context of existing knowledge.

Required Lab Manual:
A lab book is not required for this course. **With the exception of the first two labs, students are required to print the material posted on Canvas for each lab and bring it to class.** In addition, students should bring their textbook used in the lecture class as a source of reference.

Recommended Reading:
The following texts are required for the lecture courses ESC1000: Introduction to Earth Science and GLY1010: Physical Geology. These texts are available in the bookstore or can be purchased directly from McGraw Hill (Recommended). Suggested reading for each lab are listed in the schedule below.


Internet Resources
This is a web assisted course. A course webpage will be maintained with Canvas. This page will contain the lab materials and links to the textbook websites. To access this resource, go to https://ecampus.fiu.edu/ and click on Canvas under the Login menu. In the Canvas Login window, enter your FIU MyAccounts User Name and Password. Select your section, for example: ESC1000L U02 1188 Fall 2018. For help with Canvas, click the Student menu on the ecampus website or call the UTS Help Center at (305) 348-2284.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Recommended Chapter Reading</th>
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</table>
| 1.   | Aug 20 - 24 Numbers, Data and Graphs (Monday classes will start with Topographic maps lab) | EES: Ch. 1  
EG: Ch. 2 |
| 2.   | Aug 27 - 31 Topographic Maps | EES: Ch. 1  
EG: Ch. 2 |
| 3.   | Sept 3, Monday Labor Day Holiday (No classes)  
Sept 4 – 7 Minerals | EES: Ch. 2  
EG: Ch. 4 |
| 4.   | Sept 10 – 14 Igneous Rocks and Rock Cycle | EES: Ch. 3  
EG: Chs. 1 & 5 |
| 5.   | Sept 17 - 21 Sedimentary and Metamorphic Rocks | EES: Ch. 3  
EG: Chs. 7 & 8 |
| 6.   | Sept 24 – 28 Geologic Time | EES: Ch. 4  
EG: Ch. 9 |
| 7.   | Oct 1 – 5 Deformation of rocks | EES: Ch. 7  
EG: Ch. 8 |
| 8.   | Oct 8 – 12 Plate Tectonics, Earthquakes, and Volcanoes | EES: Chs. 5,6,7  
EG: Chs. 3,6,12 |
| 9.   | Oct 15 – 19 Surface Processes (hydrologic cycle, rivers, mass wasting) | EES: Chs. 9,10 &12  
EG: Chs. 15,16 & 17 |
| 10.  | Oct 22 - 26 Florida Geology and Groundwater | EES: Ch. 12  
EG: Ch. 17 |
| 11.  | Oct 29 - Nov 2 NO CLASS | |
| 12.  | Nov 5 - 9 Coasts/Beaches and Sea Level Rise | EES: Ch. 11  
EG: Ch. 14 |
| 13.  | Nov 12 Monday Veterans Day (No Classes)  
Nov 13 – 16 Global Temperatures, Insolation and Albedo | EES: Ch. 13  
EG: Chs. 1, 13 & 14 |
| 14.  | Nov 19 – 21 Wind Circulation and Atmospheric Moisture  
Nov 22-23 Thanksgiving Holiday (No Classes) | EES: Chs. 14 & 15  
EG: Ch. 13 |
| 15.  | Nov 26 - 30 Weather Maps and Hurricanes | EES: Ch. 16  
EG: Ch. 13 |

Classes will not meet during the final week of the semester (Dec 3-7) and there is NO FINAL EXAM in this class. All assignments must be completed and submitted to the instructor by Nov. 30, 2018.

**Course Policies**

1. ATTENDANCE IS MANDATORY. There is no opportunity to make-up missed lab work. Labs start on time. If you leave before the conclusion of the lab you will receive partial or zero credit. Students are responsible for ALL class-related work regardless of attendance. Lab assignments cannot be made up or completed outside of class. With prior approval and arrangement, it may be possible to attend another lab section if scheduling conflicts arise.
2. Complete lab exercises independently during lab. When asked to work on a team, each team member is to think independently to complete the assignment in his/her own words in his/her own lab manual. To receive full credit you are expected to print material posted on Canvas, bring it to class, and complete all the exercises in each of the chapters during the lab period. You will be required to complete a lab evaluation report on your own at the end of each class and turn it in to your instructor.

3. If you plan to be absent to observe a religious holiday make arrangements with the Lab Instructor during the first week of class (University policy). Any makeup lab must be completed by the end of the week following the religious holiday at the latest.

4. Cellular phones, etc., must be turned off and kept out of sight. Any form of cell phone use in the class or any disrespectful behavior will reduce your final grade. **If you miss three or more labs, you will automatically fail the course.** Each student will be responsible for lab equipment/materials and for cleaning up his/her area. No food or drinks in the lab.

5. All students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of Florida International University. Any act that violates the student/instructor trust will not be tolerated. Acts of cheating, plagiarism, or lying will result in an “F” grade for the class and the possibility of expulsion from FIU. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook.

**Approximate Lab Timetable**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>First 35 min</td>
<td>Exploration and investigation</td>
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<tr>
<td>20 min</td>
<td>Lecture on the topics covered in the lab</td>
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<tr>
<td>Body of Lab (60 min)</td>
<td>Supervised lab exercises</td>
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<tr>
<td>Last 20 min</td>
<td>Review/Evaluation/Clean-up</td>
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**Grading Policy**

Grades will be assigned on the basis of the completeness and quality of the lab assignments.

- Attendance and lab completion: 45%
- Lab Evaluation (report): 45%
- Participation: 10%

Grades will be assigned on the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percent</th>
<th>Grade</th>
<th>Percent</th>
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<tbody>
<tr>
<td>A</td>
<td>93 – 100</td>
<td>C+</td>
<td>77 – 79</td>
</tr>
<tr>
<td>A-</td>
<td>90 – 92</td>
<td>C</td>
<td>70 – 76</td>
</tr>
<tr>
<td>B+</td>
<td>87 – 89</td>
<td>D</td>
<td>60 – 69</td>
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<tr>
<td>B</td>
<td>83 – 86</td>
<td>F</td>
<td>Less than 60</td>
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<tr>
<td>B-</td>
<td>80 – 82</td>
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