GY 111-102: Physical Geology 3-credit hours (Web-enhanced)
Autumn 2016
Your Host: Dr. Doug Haywick
http://www.southalabama.edu/geology/haywick

Course Description (Bulletin): Materials that make up the Earth as well as the properties and geological processes that operate in the Earth. Special topics include plate tectonics, mineral chemistry, the rock cycle, sedimentary processes, metamorphism, and geological map reading. Co-requisite: GY 111L

Objectives and Goals: The subject matter examined in the course covers the basics of physical geology. Topics covered are itemised below. If all goes as planned, upon completion of this course, students will 1) be able to identify common rocks and minerals; 2) be able to interpret geological maps and 3) understand major theories or Earth sciences (including plate tectonics). Please note that this is a tentative schedule and the management reserves the right to change some of the material in the event of unforeseen circumstances. You are expected to keep up with the reading prescribed for each week. GY 111 is the first of 2 introductory courses in geology.

LECTURE GAME PLAN

Week 1 INTRODUCTION/PLATE TECTONICS
  Tues:  1) Introduction, Course Structure; Geo-careers
  Thurs: 2) Intro to Plate Tectonics (Quiz)

Week 2 MINERALS
  Tues:  3) Plate Tectonics, the Earth's interior and the rock cycle
  Thurs: 4) Basic Mineral Chemistry (Quiz)

Week 3 MINERALS/VOLCANISM
  Tues:  5) Crystal Chemistry and mineral classification
  Thurs: 6) Volcanism 1 (Quiz; Assignment 1)

Week 4 PLATE TECTONICS AND VOLCANISM
  Tues:  7) Volcanism 2
  Thurs: 8) Bowen's Reaction Series (Quiz)

Week 5 VOLCANIC AND PLUTONIC ROCKS
  Tues:  9) Extrusive igneous rocks
  Thurs: 10) Intrusive igneous rocks (Quiz)

Week 6 SEDIMENTATION
  Tues: 11) Lecture Test 1 (September 20)
  Thurs: 12) Weathering, erosion and soils (Quiz)

Week 7 SEDIMENTATION
  Tues: 13) Sediment classification and transport
  Thurs: 14) Alluvial fans, rivers and deltas (Quiz; Assignment 2)

Week 8 SEDIMENTATION
  Tues: 15) Beaches, reefs and carbonate shelves
  Thurs: 16) Fall Break (No lecture)

Week 9 SEDIMENTATION
  Tues: 17) Groundwater
  Thurs: 18) Hydrogeology (Quiz; Assignment 3)

Week 10 GEOLOGICAL TIME
  Tues: 19) Lecture Test 2 (October 18)
  Thurs: 20) Geological time
Week 11 METAMORPHISM
Tues:  21) Rock Deformation
Thurs:  22) Agents of metamorphism (Quiz)

Week 12 METAMORPHISM
Tues:  23) Regional metamorphism
Thurs:  24) Contact metamorphism (Quiz)

Week 13 STRUCTURAL GEOLOGY
Tues:  25a,b) Metamorphic facies and Retrograde Metamorphism
Thurs:  26) Bedding, attitude and geological maps (Quiz) [Rock/mineral Photo Assignment
Due via Email by 5 PM]

Week 14 STRUCTURAL GEOLOGY
Tues:  27) Folds
Thurs:  28) Faults (Quiz; Assignment 4)

Week 15 MOUNTAIN BUILDING
Tues:  29) Great Earthquakes (death and destruction 101!)
      *Tuesday Nov 22 12:30 to 3:00 PM; GY 302 Mineral Poster Show; extra credit
Thurs:  30) Thanksgiving Holiday
      November 25-27 [Mobile Rock and Mineral Society rock/mineral show; extra credit

Week 16 MOUNTAIN BUILDING
Tues:  31) Mountain Building 1 (Isostacy and thrust faults)
Thurs:  32) Mountain building 2 (Appalachians) ; Final Exam preparation

Tuesday Dec 6: Final Exam 1:00 to 3:00 PM

Reasonably useful information:

Assessment: You have two options for how your grade will be calculated in this class. Option 1 is the default and involves a grade for attendance and is best suited for students who actually like attending classes. Option 2 is best suited for students who feel that they do best in an exams-only testing mode. During the second week of class, you will be asked to select one of these options. Your signature will be considered a binding contract (i.e., no changes will be permitted once your choice has been made).

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<th>Option 1</th>
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<td>Attendance*</td>
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<td>Photo assignment</td>
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<td>Quizzes*</td>
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<td>Class Assignments</td>
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<td>Lecture Test 1</td>
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<td>Lecture Test 2</td>
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<td>Lecture Test 2</td>
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<td>Final Exam</td>
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Grading: A - 90+     B - 80 to 89   C - 70 to 79   D - 60 to 69   F - 59 and below

Text book: GY 111 does not require a textbook. On line notes, assignments and where necessary, labs, are available on the class website.

Laboratories: You need to be in a GY 111L lab in the same semester that you are doing GY 111. If all is going to plan, the material in each will flow nicely together. Please note: It is up to you to examine the rocks and minerals that are assigned in the lab course and to do any additional laboratory assignments your lab instructor gives you. They will also help with the lecture material.
Missed exams: The reason for producing a syllabus is to give students advanced notice of exams and assignment due dates. Translation: there is no excuse for missing an exam. However, sometimes it happens. If you have a legitimate excuse for missing an exam (i.e. medical problem), you will be permitted to write a make-up during the last week of classes provided that you show me a signed certificate from a medical doctor stating that it was impossible for you to make the exam. The make up exam will consist of 2 essay questions (i.e. no easy stuff like multiple choice questions).

Late work Policy: I do not accept late work past the due date without a medical excuse. Un-excused late assignments will receive a grade of 0.

The fine print: Plagiarism and cheating are not permitted in this class and either of them will result in severe embarrassment to you (and quite possibly an F for the assignment or exam in question) if you are caught doing them. Be sure to use proper reference citations in your take home exam otherwise it’s plagiarism. All written reports (essay questions, term papers, assignments) are subject to examination through the Turnitin website. This is not meant as a punishment, but is instead, a process intended to improve your writing skills. See me if you have questions about plagiarism and/or Turnitin during my office hours.

Students with Disabilities: In accordance with the Americans with Disabilities Act, students with bona fide disabilities will be afforded reasonable accommodations. The Office of Special Student Services (OSSS) will certify a disability and advise faculty members of reasonable accommodations. If you have a specific disability that qualifies you for academic accommodations, please notify the instructor/professor and provide certification from the Office of Special Student Services. OSSS is located at 5828 Old Shell Road at Jaguar Drive, (251-460-7212).

Changes in Course Requirements: Not all classes progress at the same rate thus course requirements might have to be modified as circumstances dictate. You will be given written notice if the course requirements need to be changed.

Academic Disruption Policy: The University of South Alabama’s policy regarding Academic Disruption is found in The Lowdown, the student handbook. The University of South Alabama is a community of scholars in which the ideals of freedom of inquiry, freedom of thought, freedom of expression, and freedom of the individual are sustained. The University is committed to supporting the exercise of any right guaranteed to individuals by the Constitution and the Code of Alabama and to educating students relative to their responsibilities. If you violate these standards in my class, you will be asked to leave my class… permanently.

Student Academic Conduct: The University of South Alabama’s policy regarding Student Academic Conduct Policy is found in The Lowdown. The University of South Alabama is a community of scholars in which the ideals of freedom of inquiry, freedom of thought, freedom of expression, and freedom of the individual are sustained. The University is committed to supporting the exercise of any right guaranteed to individuals by the Constitution and the Code of Alabama and to educating students relative to their responsibilities. If you violate these standards in my class, you will be asked to leave my class… permanently.

JagSuccess: This class is part of the JagSuccess Program which is designed to help students be successful in 100-200 level courses. If you are not doing well, you will receive an email instructing you to see your professor along with instructions to access an online tutorial intended to help with common problems affecting academic performance. Watch for this email during week 8 of this semester."

Online Writing Support: The University of South Alabama provides online writing tutoring services through SMARTTHINKING, an online tutoring service. SMARTTHINKING is available at http://services.smarthinking.com. Students may enter the site by logging on with their Jag number and using the last four digits of the social security number as the password. For log-on problems, technical questions and/or on-campus writing assistance, contact the USA Writing Center at 251-460-6480 or e-mail csaint-paul@usouthal.edu.

*Option 1 students ONLY

Attendance: Electing to attend class is always the best way to do well in class as much of the material we will discuss will not be covered on the web notes. If you miss the lectures, you will miss this material. Attendance for option 1 students is mandatory (it's worth 10% of your mark). I will dock you if you have 4 or more unexcused absences (approximately 12% of the lectures). If you have 6 or more unexcused absences (approximately 20% of the lectures/labs) you will receive 0% for attendance. If you miss more than 10 lectures, I will drop your final grade an additional 10%. Note: I will base your attendance on the class role I record at the start of the class. If you missed the role because you were late, it is up to you to notify me before the end of the class. If your name is not on that roll, you will be marked absent. There will be no exceptions to this attendance policy.

Quizzes: Expect 10+ quizzes on the material we cover throughout the semester. They are designed to do 2 things: 1) provide you with sample questions that might be on the exam, 2) “force” you to review your notes on a regular basis (another excellent study technique). The quizzes will be done during the first 5 minutes of class. If you are late, you will miss them and you cannot make them up.
D. Haywick Contact Information, Office Hours and Schedule

How & where to find Doug: I reside in LSCB room 049. I believe in open office hours, so feel free to pay me a visit anytime between 9:00 am & 5:00 pm. However, I will generally be in my office during the times posted on my schedule. Should you be unsuccessful in your attempts to find me, fear not! You have two options: 1) check the Where's Doug note on my door for my location during normal office hours, or 2) leave a message for me:

Telephone: 460-7569 (Haywick’s office – you can leave a message).
E-mail: dhaywick@southalabama.edu
internet: http://www.southalabama.edu/geology/haywick

D. Haywick Hours (Fall 2016 Semester)

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<th>Time</th>
<th>Monday</th>
<th>Wednesday</th>
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<td>10:10 AM - 12:00 PM</td>
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<td>12:20-2:10 PM</td>
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Time       | Tuesday          | Thursday         |
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<td>9:30-10:45 AM</td>
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<td>11:00 AM-12:00 PM</td>
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<td>12:00-2:00 PM</td>
<td>gy 302-101 Lab 1 (lscb 337)</td>
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<td>2:00-3:15 PM</td>
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<td>3:20-5:00 PM</td>
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Note: shaded areas are research/committee/personal times: STAY AWAY!

Laptops, cellphones, Tablets, PDAs, Wii/PS3/Xboxes, novels or any other distraction can NOT be used once the GY 111 lecture starts. The first time I see you playing with anything not related to this class, I will politely ask you to put it away. The next time, I will be less polite. Don’t try it 3 times.