



# Summer 2005 (Course #5924) Geology-101

# Physical Geology

Class Instructor: **Poorna Pal** MS MBA Ph.D.  
Professor of Geology

Office: CS-262, Phone: ext. 5517  
e-mail: [ppal@glendale.edu](mailto:ppal@glendale.edu)

Course website: [www.glendale.edu/~ppal](http://www.glendale.edu/~ppal)

Office Hours: Daily 10.30-11.30 AM or by appointment

Physical Geology, the subject matter of this 3-unit physical science lecture course, examines the earth materials, processes, surface morphology, internal structure, evolution, resources and environment, order to help you

- describe how geology, amongst the most visual of all physical science subjects, exemplifies the scientific process of continually matching the empirical observations and theoretical constructs and helps us understand the forces that shape our natural environment;
- establish the connections that bridge such otherwise seemingly desperate topics as earth hazards, climate change and resource crisis, and
- explain why understanding the earth processes has become increasingly crucial to our collective future.

In the process, it should help sharpen your skills of critical reasoning and articulation.

**Textbook: Tarbuck & Lutgens: Earth - An Introduction to Physical Geology (Prentice Hall)**

## Schedule for Lectures, Tests and Final Examination (8<sup>00</sup> – 10<sup>10</sup> AM, CS-266)

July 25, 26, 27, 28 and 29	<b>Preview of the Course</b> Chapters 1 (Introduction), 2 (Matter and Minerals), 3 (Igneous Rocks), 4 (Volcanoes and Other Igneous Activity), 5 (Weathering and Soil) and 6 (Sedimentary Rocks)	August 1: Class-Test 1
August 1, 2, 3, 4 and 5	Chapters 7 (Metamorphism and Metamorphic Rocks), 8 (Geologic Time), 9 (Mass Wasting), 10 (Running Water) and 11 (Groundwater)	August 8: Class-Test 2
August 8, 9, 10, 11 and 12	Chapters 12 (Glaciers and Glaciation), 13 (Deserts and Winds), 14 (Shorelines), 15 (Crustal Deformation) and 16 (Earthquakes).	August 15: Class-Test 3
August 15, 16, 17, 18 and 19	Chapters 17 (Earth's Interior), 18 (The Ocean Floor), 19 (Plate Tectonics) and 20 (Mountain Building and the Evolution of Continents)	August 22: Class-Test 4
August 22, 23 and 24 <b>August 25</b>	Chapters 21 (Energy and Mineral Resources) and 22 (Planetary Geology) <b>Overall Review of the course</b>	August 26: Final Examination (8-10.10 AM)

## Class and Grading Policies:

- DEADLINES: July 29 for ADD/DROP WITHOUT 'W', Aug 12 to DROP WITH AUTOMATIC 'W' (dropping after this means an automatic 'F') (**DROPPING OUT OF THE COURSE, WITH OR WITHOUT A 'W', IS THE STUDENT'S RESPONSIBILITY**).
- This is a COLLEGE TRANSFER COURSE. Therefore, the class will rely heavily on discussions and analyses of the ongoing processes of oceanographic interest. YOUR SUCCESS WILL DEPEND ON THE NOTES YOU TAKE IN THE CLASS, YOUR READINGS BEFORE AND AFTER THE CLASS, AND ON YOUR PARTICIPATION IN THE DISCUSSIONS. Also (a) there will be no homework or assignments, (b) an attendance below 70% will invite and F, and (c) so will even a suspicion of "cheating" and/or any other instance of disruptive and/or anti-social behavior that can also earn you negative points.
- For final grading (A ≥ 90% > B ≥ 80% > C > 70% > F), best 3 of the 4 Class-Tests will account for 60% of the overall grade, the comprehensive Final Examination for 30%, and presence and participation in the class, that may be also measured through pop-quizzes, for the remaining 10%. Also, to secure the grade A, a student should have secured 90% marks in at least 2 of these Class-Tests. **Note that, while each of the Class-Tests will be scantron based, in addition to two short notes, the comprehensive Final Examination will require a "blue book" and will comprise one essay and two short notes.**
- Videos: You may also wish to browse the corresponding episodes in "EARTH REVEALED" videos available at the Learning Center.
- Any "Extra Credit" work — an ORIGINAL essay or term paper or research paper, project or report — will be graded on a -5 to +5 scale. Such a grading will be done only in marginal cases and therefore at the time of the Final grading.