

ES 121-03
Earth Science - Lecture
Fall 2004
Syllabus

1. Course and Instructor Information

- Course: Earth Science. Major concepts of astronomy, geology, and meteorology with selected examples of interrelationships. Recommended for the student whose curriculum includes a year of science. Prerequisite or concurrent: ES121L.
- Credit: 3 semester hours
- Text (required): Earth Science 10th edition by Tarbuck and Lutgens
- Instructor: Richard A. Statom, Ph.D., P.G.; Office: FSB 415
Office Hours: Monday 2:00 PM-4:00 PM
Tuesday 9:30AM-12:00 PM, 2:00 PM-4:00 PM
Thursday 9:30 AM-11:30 AM
Friday 9:30 AM-11:00 AM
Office Phone: 765-4347
Email: rastatom@una.edu

2. Course Goals: Provide students with a basic understanding of the earth sciences, on both an academic and personal level.

3. Tests

- Four (4)-100 point lecture tests (best three grades count toward final grade)
- One (1) 100 point **COMPREHENSIVE** final
- Fifteen (15) points added to the final semester grade **minus** points deducted for violations of the rules/requirements denoted in this syllabus. One (1) point will be deducted from 15 point total for each infraction.
- Multiple choice format (computer form answer sheets)
- Students are required to bring two (2) number 2 pencils to each test and the comprehensive final. No pencil sharpening allowed after the test are handed out.
- No one will be allowed to enter the classroom and begin a test or comprehensive final ten (10) minutes after the test are first handed out. Any student arriving after the ten minute window will be given a zero (0) for that test/examination.
- No make-up tests

4. Grades

- Based on percentage of 400 points
- 100-90%=A, 89-80%=B, 79-70%=C, 69-60%=D, >60%=F
- No special papers or projects accepted for extra credit

5. Course Rules

- Cheating is prohibited and will result in failure of the course. Offenders may be reported to University officials for disciplinary action.
- Prompt attendance is required.
- All cell phones and/or pagers shall be **TURNED OFF** before class begins.

6. It is the policy of the University of North Alabama to afford equal opportunity in education to qualified students. Therefore, a student who has a disability that inhibits the student's ability to meet course requirements and who desires accommodations must contact the instructor and Development Services within the first three class meetings of the semester (within the first three days during summer terms). The goal is to develop a timely accommodation plan and to file an Americans with Disabilities Act (ADA) Accommodation form. Course requirements will not be waived, but accommodations will be made to allow each student to meet course requirements, provided the student acts within the first three class meetings in working with the instructor to develop an accommodation plan. If a disability is identified later in the semester, a non-retroactive accommodation plan will be developed at that time.

7. Schedule

Introduction to Earth Science (p.1-17)

Astronomy (Chapters 20-23)

- a. The Big Bang (p.643-644)
- b. Stars and Galaxies (p.624-642)
- c. The Sun (p.613-620)
- d. The Solar System (p.575-601)
- e. The Earth-Moon System (p.564-573)
- f. History of astronomy (549-563)

Geologic Time Scale (Chapter 10 & 11)

- a. Origin of Time Scale (p.285-307)
- b. Summary of Earth History (p.309-331)

Test # 1

Meteorology (Chapters 15-19)

- a. The Atmosphere (p.405-429)
- b. Air Pressure and Winds (p.470-491)
- c. Weather and Storms (p.494-521)

Test # 2

The Oceans (Chapters 12-14)

- a. Geography of Oceans (p.334-335, 337-345)
- b. Composition of Seawater (p.356-357)
- c. Ocean Circulation (p.376-381)

Geology

A. **The Earth's Interior** (Chapters 6-9)

- Earthquakes (p.167-181)
- Earth's Layered Structure (p.182-189)
- Plate Tectonics (p.192-223)
- Volcanoes and igneous Activity (p.226-256)
- Mountain Building (p.260-281)

Test # 3

B. **Running Water and Groundwater** (Chapter 4)

- Hydrologic Cycle (p.98-99)
- Surface Water (p.99-113)
- Groundwater (p.113-127)

C. **Earth Materials** (Chapters 1-2)

- Minerals (p.20-37)
- Rocks
 1. The Rock Cycle (p.40-42)
 2. Igneous Rocks (p.42-47)
 3. Sedimentary Rocks (p.47-55)
 4. Metamorphic Rocks (p.55-60)
 5. Mineral Resources (p.60-63)

Test #4

D. **Weathering, Soil, and Erosion** (Chapter 3)

- Weathering (p.68-76)
- Soils (p.76-81)
- Erosion of Soils (p.81-85)

E. **Glaciers, Deserts, and Wind** (Chapter 5)

- Glaciers (p.130-148)
- Deserts (p.148-153)
- Wind (p.153-159)

F. **Mass Wasting** (Chapter 3, p. 85-93)

ES 121-D
Earth Science Laboratory
Fall 2004
Syllabus

1. Course Description and Instructor Information

- Course: Laboratory for ES 121 consisting of exercises in astronomy, meteorology, and geology (rocks, minerals, fossils, maps). Saturday field trip may be offered.
- Prerequisite or concurrent ES121.
- Credit: 1 semester hour
- Laboratory Manual (required): Applications & Investigations in Earth Science 4th edition by Tarbuck, Lutgens, and Pinzke
- Instructor: Richard A. Statom, Ph.D., P.G.; Office: FSB 415
Office Hours: Monday 2:00 PM-4:00 PM
Tuesday 9:30AM-12:00 PM, 2:00 PM-4:00 PM
Thursday 9:30 AM-11:30 AM
Friday 9:30 AM-11:00 AM
Office Phone: 765-4347
Email: rastatom@una.edu

2. Course Goals: Provide students with a basic understanding of the hands-on aspects of the earth sciences, on both an academic and personal level.

3. Tests

- Two (2)-100 point laboratory tests (see attached sheet for schedule).
- No one will be allowed to enter the laboratory and begin a test ten (10) minutes after the test are first handed out. Any student arriving after the ten minute window will be given a zero(0) for that test/examination.
- No make-up tests

4. Laboratories

- Ten (10)- fifteen (15) point laboratory exercises, with the nine (9) highest grades used in the computation of the final grade.
- If a student misses a laboratory session, a zero will be given for that lab.
- Completed lab exercises are due at the end of each laboratory session.
- No make-up labs will be accepted without prior approval from the instructor.

5. Grades

- Based on total of 335 points
- 335-300=A, 299-268=B, 267-234=C, 233-200=D, >200=F
- No special papers or projects accepted for extra credit

6. Course Rules

- Cheating is prohibited and will result in failure of the course. Offenders may be reported to University officials for disciplinary action.

- Prompt attendance is required.
- All cell phones and/or pagers shall be **TURNED OFF** before the laboratory session begins.

7. It is the policy of the University of North Alabama to afford equal opportunity in education to qualified students. Therefore, a student who has a disability that inhibits the student's ability to meet course requirements and who desires accommodations must contact the instructor and Development Services within the first three class meetings of the semester (within the first three days during summer terms). The goal is to develop a timely accommodation plan and to file an Americans with Disabilities Act (ADA) Accommodation form. Course requirements will not be waived, but accommodations will be made to allow each student to meet course requirements, provided the student acts within the first three class meetings in working with the instructor to develop an accommodation plan. If a disability is identified later in the semester, a non-retroactive accommodation plan will be developed at that time.