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| INSTRUCTOR | Name: TBA and E-mail: TBA |
| OFFICE HOURS | Hours and Location: TBA |
| TEXTBOOK | Earth Science Laboratory Manual (Physics 203A), sold by NJIT bookstore. |
| DESCRIPTION | PHYS 203A is a laboratory course associated with The Earth in Space course (PHYS 203). The manual is also used as a lab report. |
| HELP | <ul style="list-style-type: none"> - Visit or email your instructor if you are having trouble with the lab course. - If you need an accommodation due to a disability, please contact Scott Janz (scott.p.janz@njit.edu 973-596-5417), Associate Director of the Office of Accessibility Resources and Services, Kupfrian Hall 201 to discuss your specific needs. |
| GENERAL INFORMATION | <ul style="list-style-type: none"> - There is no exam in the lab course. - No make-up for missing labs is allowed. - No eating or drinking in the laboratory room. - Experiments are a group effort. - Laboratory reports should be individual ones submitted by each student. - Lab computer login method: Username: your UCID and Password: your UCID password |
| DELIVERY MODE | <p>Face-to-Face:</p> <p>Delivery of instruction is structured around in-person classroom meeting times. Instruction is delivered in person and students are expected to attend class.</p> |
| LEARNING OBJECTIVES | <ul style="list-style-type: none"> - Students will master basic physics concepts by performing an experiment relevant to corresponding course work. - Students will gain hands-on experiences with experimental processes. - Students should develop collaborative learning skills by working in a group. |
| LEARNING OUTCOMES | <ul style="list-style-type: none"> - Students will demonstrate basic experimental skills by practicing setting up and conducting an experiment. - Students will demonstrate an understanding of the analytical methods required to interpret and analyze results and draw conclusions as supported by their data. - Students will demonstrate basic communication skills by working in groups on laboratory experiments and the thoughtful discussion and interpretation of data. |
| ATTENDANCE | <ul style="list-style-type: none"> - Attendance policy is very strict. It is a student's responsibility to confirm his/her attendance with the Lab instructor. - It is required for students to attend all lab experiments since grading is based on attendance, participation, and lab report. - It is required for a student to sign the attendance sheet in every lab class. If a student fails to sign it, it is treated as being absent. - Attendance will be checked in the beginning and middle of each class by your instructor. - If a student does not appeal and resolve his/her attendance within 7 days, no further complaint will be accepted. - If a student makes more than 3 unexcused absences, the student is very likely to fail the lab course. - If a student has excusable absences, the student should contact the Office of the Dean of Students to email an official excuse to his/her lab instructor. - Students can check their Attendance and Participation grade by appointment with the TA - There might be a camera recording by a lab instructor for attendance and participation (It is required for the students to sign a waiver acknowledging that they are being recorded). |
| GRADING POLICY | <ol style="list-style-type: none"> 1. The grading guidelines are as follows: Attendance (20%); Participation (20%); Laboratory Report (60%) 2. A grade of zero (0) will be given for any missed experiment with no excuse. 3. It is required to submit a lab report at the end of each lab – penalty for lateness is 10 % per day. |

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| GRADING SCALE | 90 - 100 % = A, 85 – 89 % = B+, 80 – 84 % = B, 75 – 79 % = C+, 65 – 74 % = C, 50 – 64 % = D, 0 – 49 % = F |
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LAB COURSE SCHEDULE

| Week | Period | Experiment |
|--------------|---------------------|-----------------------------------------------------------------|
| 1* | 9/3(T) - 9/9(M) | Introduction |
| 2 | 9/10(T) - 9/16(M) | Earth's Geography I |
| 3 | 9/17(T) - 9/23(M) | Earth's Geography II |
| 4 | 9/24(T) - 9/30(M) | Rock Identification |
| 5 | 10/1(T) - 10/7(M) | Properties of Water: Latent Heat of Fusion |
| 6 | 10/8(T) - 10/14(M) | Earthquakes: Locating the Epicenter |
| 7 | 10/15(T) - 10/21(M) | Understanding Density |
| 8 | 10/22(T) - 10/28(M) | The Archimedes Principle |
| 9 | 10/29(T) - 11/4(M) | The Acceleration due to Gravity |
| 10** | 11/5(T) - 11/11(M) | Properties of Water: Specific Heat |
| 11 | 11/12(T) - 11/18(M) | Properties of Water: Dissolved Oxygen |
| 12 | 11/19(T) - 11/25(M) | Properties of Water: Salinity |
| 13*** | 11/26(T) - 12/4(W) | The Ideal Gas Law: Determining the Absolute Zero of Temperature |
| 14 | 12/5(R) - 12/11(W) | No Lab |

* 9/9 (Mon.) Last Day to add/drop a class

** 11/11 (Mon) Last Day to Withdraw from Classes

*** 11/26 (Tue) Thursday classes meet

*** 11/27 (Wed) Friday classes meet

*** 11/28 (Thurs.) and 11/29 (Fri.) Thanksgiving Recess Begins. No classes

Physics Laboratory Safety

- Food and drink are not permitted during class in the lab at any time.
- Wear safety glasses all the time during lab experiments.
- Do not come into the lab room early unless the instructor is present.
- Do not wear loose hair or clothing around moving equipment.
- Do not set equipment too close to the edge of the table.
- Do not activate any electric circuit or apparatus until the instructor inspects it.
- Never touch a possibly live circuit and do not touch electrical equipment with wet hands.
- Only use laboratory equipment for the instructional purpose for which it was intended.
- Never look directly at the beam of a laser and light from a lamp used for experiment.
- All trash and waste materials should be disposed of in the proper container. Do not pour chemicals into the laboratory sink.
- Do not shorten the electrical leads on any equipment.
- Any equipment except computers not in use should be turned off.
- Do not take apart any apparatus or piece of equipment.
- All damaged equipment and chemical spills should be immediately reported to a laboratory instructor or laboratory staff.
- Accidents and emergencies must be immediately reported to the laboratory instructor. (NJIT Emergency call number: 911)
- Be aware that fire extinguishers are in Rooms 406T and 407T.