ATM102/EST102 WEATHER AND CLIMATE Spring

TBA

ATM 102 / EST 102 - Weather and Climate 3 Credits

This course is approved as a core curriculum course and may be used to satisfy the Natural Sciences E requirement.

Teaching Staff:

Lecturer:
  - Jeffrey Tongue, Lecturer, School of Marine and Atmospheric Sciences.
  - jeffrey.tongue@stonybrook.edu
  - Office Hours: None

Teaching Assistants: TBA

Please contact a TA by e-mail to make an appointment.

TA office hours are held in ESS Rm. 104 (check)

Course Description:

Introduces the nature and causes of common meteorological phenomena, severe weather occurrences, and climatic patterns. Topics include formation and movement of air masses and large-scale storms; techniques for weather prediction; weather satellites; hurricanes, tornadoes, and thunderstorms; cloud and precipitation types; the climatic history of the earth; and actual and potential effect of human activities on weather and climate, and of weather and climate on humans.

Course Pre/co-requisites: None
Course Objectives:

Understand the basic structure of the atmosphere. Understand the importance of the Energy Balance between the Earth and Sun. Describe the daily and seasonal changes in temperature patterns. Describe the importance of moisture in the atmosphere including precipitation processes. Understand the causes of horizontal atmospheric motions that drive the Earth's weather. Explain various types of air masses and frontal theory. Appreciate the various forms of severe weather including Tornadoes and Hurricanes. Understand how to interpret and utilize basic weather forecasts based on current meteorological data sets available on the Internet. Understand the weather patterns and phenomena common to Long Island. Appreciate climate change and its implications. Understand climate classification.

Course Requirements:

Attendance and Make Up Policy:

Make up exams are only granted for exceptional reasons. Contact the instructor or one of the TAs within 3 days of the scheduled exam and brings documentary evidence for the emergency. Missed quizzes cannot be made up. See TA or fellow student for copies of any missed quiz.

Description and schedule of Required Readings and/or Assignments:

Read Chapters in accordance with the attached


Authors: Lutgens, Tarbuck and Tasa. Publisher: Pearson ISBN13: 9780321756312 Hardcopy (Purchase / Rent) or eTextbook
Grading:

Quizzes (25%): A ten question quiz is given at the start of each new chapter (on the previous chapter’s material).

• o The quiz focuses on the material highlighted in the “Concept Checks” provided in the textbook.
• o Lowest two (2) grades are dropped.
• o There is no quiz for the chapter preceding the Mid Term or Final Exam.
• o Quizzes are given at 5:30 PM on the day stated.

  o There is NO make up for missed quizzes.  Mid-Term (25%)  Final (Comprehensive) (35%)  Homework (15%) – Completed prior to Quiz or Mid Term via MyMeteorologyLab on-line for the appropriate chapter.

All Exams/Quizzes consist of short answer and/or multiple choice questions.

Extra Credit: None  All exams are held in the classroom

Grading:

A 90-100 A-88-89 B+
84-87 B 80-83 B-78-79
C+ 74-77 C 70-73
C-68-69 D+ 64-67 D
60-63 F < 60
Class Protocol:

Expectation of Students:

Attend Class !!!
Be on time too – doors open at 5:10 PM.
Read textbook chapters as assigned.
Complete assigned homework.
Reach out to TA or Instructor as appropriate.
Turn off cell phones during class - No Texting.
Water only in the lecture hall
Disruptive behavior will result in you being asked to leave.

Class Resources:

Blackboard

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Any suspected instance of academic dishonesty will be reported to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/

Critical Incident Management: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.

Information For Students With Disabilities: If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services at (631) 632-6748 or http://studentaffairs.stonybrook.edu/dss/. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with teaching staff and Disability Support Services. For procedures and information go to the following website: http://www.sunysb.edu/ehs/fire/disabilities.shtml

HB/ed
ATM102Spring2014