Course Prerequisites: MET3503 Weather and Forecasting or GEO3250 Climatology

Course Information
Atmospheric teleconnections are recurring and persistent, large-scale patterns of pressure and circulation anomalies. They can oscillate over periods of several weeks to decades and can influence temperature, rainfall, storm tracks, and jet stream location/intensity over vast areas. Often, they are responsible for abnormal weather occurring at the same time but in different locations across the globe. Our goal is to examine teleconnections in northern and southern hemispheres to learn how each pattern was discovered, how the index that characterizes the phase of each teleconnection is calculated, where the centers of action occur, and the types of weather associated with the different phases. This course will increase your understanding of global weather patterns.

No Required Textbook: Weekly readings will be posted to Sakai.
Tools: Bring a flash drive or similar portable storage device to EVERY class to save your work

Grades and Grading Scale
Weekly Topics Quizzes: 50% 2 In-class presentations 15% each Final Project: 10%
Sakai discussion postings/in-class discussions 10%

A: 92.5 % +  A-: 89.5 - 92.4 %  B+: 86.5 - 89.4%  B: 82.5 - 86.4%  B-: 79.5 – 82.4%
C+: 76.5 - 79.4%  C: 72.5 - 76.4%  C- : 69.5 – 72.4%  D+: 66.5 - 69.4%  D: 62.5 - 66.4%
D- : 59.5 – 62.4%  E: < 59.5%

It is your responsibility to know your current grade. Grades will be posted to Sakai. Information pertaining to UF grading policies can be found here: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Lectures, Readings, and Class Discussions
After reviewing basic atmospheric circulation and associated data, we will spend one week on each teleconnection. During Monday’s class, I will give an overview presentation of the important details you should know about each teleconnection and we will discuss readings that I have posted to Sakai. Nine days later during Wednesday’s class, students will present readings that they have selected, conduct a data analysis exercise, and submit to me quiz questions based on the material they have presented. Students must work together to present their teleconnection as a whole and each student must present one article on their own. Groups will meet with me on the Wednesday prior to their presentation to discuss the material they have collected so far and ask questions so that their presentation runs smoothly. Readings must be uploaded to Sakai at this time. You will receive time on Wednesdays to work with your group in class but do expect to spend time out of class on preparation as well. You will participate both in class and online through Sakai discussion boards each week. You will participate in the delivery of 2 teleconnections. An outline of the questions the group will ask and points each student will emphasize during the presentation must be uploaded prior to the start of class on the day of the presentation.
**Quizzes**
Weekly topics quizzes will be available on Sakai following the discussion of each teleconnection. Quizzes will draw several questions from a pool in randomized order and can only be taken once. An email notification of quiz availability and due dates will be sent to all students through Sakai. Please retain this email as a reminder for when quizzes will be active. Open for at least 1 week, once quizzes close, they will not be re-opened. Ten quizzes will factor into your grade. It is NOT permissible to take the quiz along with other students or to work together to answer quiz questions.

**Final Project**
Undergraduate students will collaborate on a final project that explores the types of research being conducted for several different teleconnections. You will collect information on who is performing the work, where they are located, where the research is being conducted, and what was discovered. You will then map the locations and make a joint presentation to the class. You will not be required to write a paper or take a final exam. More details on the project will be provided on a separate handout.

**Academic Honesty**
You are bound by the student academic honor code. “We, the members of the University of Florida Community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”
“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”
You are encouraged to help each other with projects, but you must turn in your own work. All suspected cases of honor code violations will be reported to the Dean of Students Office and actions such as receiving a zero for the assignment, lowering of the course grade by one letter, and/or other penalties will be assigned.

**Sakai**
This syllabus, announcements, copies of handouts, grades, and other course information will be posted on Sakai. Access this page at http://lss.at.ufl.edu If you miss a class, it is your responsibility to learn the material covered during your absence. Come see me if you have questions. You are advised to check Sakai frequently to verify that week’s activities and any announcements about upcoming quizzes, projects, etc. I may also post announcements to Sakai, and many of your assignments will be submitted through this website.

**Disability Statement**
Students requesting classroom accommodation must first register with the Dean of Students Office. This office will provide documentation to the student who must then provide this documentation to the Instructor. Please provide this documentation to me as soon as possible and a minimum of 1 week before a quiz or exam.

**Attendance and Proper Conduct**
Although attendance will be note regularly taken, your performance in this course will suffer if you do not attend class regularly. We will be utilizing the computers in TUR 3018 – please keep all foods and beverages away from areas where computers are being used. DO NOT save anything to the hard drive of the computer! It may be erased as soon as you log off. Remember to turn off cell phones, and please refrain from casual conversation once class begins. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

**Online Course Evaluations**
Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.
Lecture Topics
Review of basic atmospheric circulation and associated data
Introduction to teleconnections
El Nino Southern Oscillation
Pacific Decadal Oscillation
Pacific/North American
North Atlantic Oscillation
Arctic Oscillation/Northern Annular Mode
Atlantic Multidecadal Oscillation
Madden-Julian Oscillation
Indian Ocean Dipole/ Indian Ocean Subtropical Dipole (also called Subtropical Indian Ocean Dipole)
Southern Annular Mode/ Antarctic Oscillation

Important Dates
Quiz availability dates will be sent out via Sakai
September 2 – No Class Labor Day
November 11 – No Class Veteran’s Day
November 27 – No Class Thanksgiving
December 2 and 4 – Student in-class presentations of final projects (no final exam)

Important Web Pages
http://www.cpc.ncep.noaa.gov/data/teledoc/telecontents.shtml
ftp://ftp.cpc.ncep.noaa.gov/wd52dg/data/indices/tele_oldindex.nh
http://www.jisao.washington.edu/aa0/
http://apps.webofknowledge.com
http://weather.gov/
http://www.wmo.int/pages/index_en.html