

Instructor Information

**Name**

Dr. Shawn Milrad

Email

milrads@erau.edu

Phone

386-226-7392

Student Hours/Office Hours

Dr. Milrad:

- **MWF: 2-4 pm**
- **TuTh: Noon-5 pm**
- **By appointment**

For COVID-19 reasons, if you do wish to meet in my office, I politely request that you wear a face covering. I'm also more than happy to meet with you in the Weather Lab, outside at a picnic table, or virtually via Zoom. Just let me know!

Weather Lab Tutor for this course: Kelsey Ennis

- E-mail: ennisk3@my.erau.edu
- Available in the Weather Lab: 9-11 am MWF

Office Location

COA 331

Instructor Page

Forecast links: <http://www.shawnmilrad.com/forecast>

Additional Info

Synoptic charts: <https://wx.erau.edu/milradsyn.php>



Operational Analysis and Forecasting DB-WX 327

Section(s): 01DB

Daytona/Prescott 2022 Spring

Catalog Course Description

Introduction to operational weather analysis and forecasting using conceptual understanding of observations, numerical model output, and synoptic-scale processes. Meteorological time and date conventions; surface station plots; METAR and SYNOP code; upper-air station plots; isoplething of surface and upper-air isobaric charts; basic satellite and radar feature identification; temperature and vorticity advection; advection on upper-air and sea-level pressure charts; vorticity, divergence, and continuity; advection and relationship to vertical motion; pattern recognition and conceptual analysis using upper-air charts; pattern recognition and conceptual analysis using sea-level pressure charts; skew-T analysis; types of soundings; basic temperature and precipitation forecasting

Course Information

Academic Term: Daytona/Prescott 2022 Spring

Term Dates: Jan 12, 2022 - May 5, 2022

Credit Hours: 3

Mode of Delivery: In Person

Class Meetings: 04:00 PM - 04:50 PM Monday,Wednesday,Friday

Location: College of Aviation 353

Additional Course Description

Course Objectives

- Gain further understanding of meteorological instrumentation and observations.
- Gain a conceptual understanding of introductory atmospheric dynamic and thermodynamic principles and apply them to basic weather analysis and forecasting.
- Be able to create and interpret basic meteorological charts, including: upper-air isobaric charts, sea-level pressure charts, and atmospheric soundings (skew-T log-P diagrams).
- Be able to produce basic temperature and precipitation forecasts using qualitative techniques.

Course Notes

- This class is in part a **weather discussion class**. I will try to spend a portion of most class periods giving a current weather briefing.
- **I strongly encourage you** to verbally participate in class weather discussions.
- **I am here to help you as much as I can**. Please feel free to contact me at any time. If I am not around, send me an email and I will get back to you ASAP.

COVID-19 Notes

- **If you cannot make class due to quarantine or illness**, I will be recording and posting lectures on EagleVision Zoom through Canvas. **Please report your illness to Health Services/Dean of Students** so I can receive official documentation.
- But remember, **in-person attendance is part of your grade, unless you have a university-approved reason to be excused**.
- I understand this can be an uncertain and scary time for all of us. I promise that no matter what your situation, I will work with you. Please feel free to talk with me at any time.

Course Goals

1. Gain a conceptual understanding of introductory atmospheric dynamic and thermodynamic principles and apply them to basic weather analysis and forecasting.
2. Be able to create and interpret basic meteorological charts, including sea-level pressure charts, upper-air isobaric charts, and atmospheric soundings.
3. Be able to produce a general temperature and precipitation forecast using conceptual analysis and forecasting techniques.

Student Learning Outcomes

1. Identify the main synoptic features on sea-level pressure charts and associated satellite and radar imagery, and describe the typical weather associated with those features.
2. Describe different types of upper-air charts, identify the main synoptic features on each chart and the associated satellite and radar imagery, and describe the typical weather associated with those features.
3. Outline how observations are coded and transmitted, and describe the differences between different types of messages (SYNOP, SHIP, CLIMAT, METAR, etc.).
4. Describe the physical ideas that form the basis of skew-T diagrams and perform basic operations on the skew-T.
5. Describe the characteristics of cyclones, anticyclones, troughs, and ridges and their associated weather, with emphasis on those affecting the region of responsibility;
6. Describe the characteristics of warm, cold, and occluded fronts and the weather associated with their passage, and describe the relationship between jet streams and weather systems.
7. Explain how the weather experienced at a specific location is a combination of effects acting on different time and space scales.
8. Analyze and interpret synoptic charts and soundings plotted on a thermodynamic diagram, and describe the limitations of the observations used in the analyses.

Additional Student Learning Outcomes

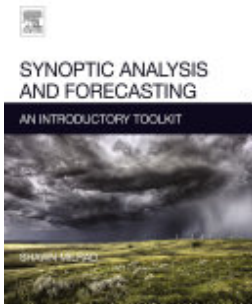
1. Describe types of meteorological observations (e.g., surface, upper air) and understand the instrumentation associated with each type.
2. Outline how observations are coded and transmitted (e.g., METAR, surface station plots).
3. Describe different types of upper-air charts, identify synoptic-scale features on each chart, and describe the typical weather associated with those features.
4. Understand the relationship between jet streams and various large-scale weather systems. Be able to associate jet streaks with regions of ascent and descent.
5. Identify synoptic-scale features on sea-level pressure charts and be able to describe the typical weather associated with those features.
6. Understand movement and intensification of mid-latitude cyclones and anticyclones.
7. Identify and describe the characteristics of warm, cold, and occluded fronts.
8. Explain how the weather experienced at a specific location is a combination of ingredients and ascent mechanisms acting on various time and space scales.
9. Describe the physical ideas that form the basis of skew-T diagrams and perform basic operations on the skew-T.
10. Differentiate between types of soundings and use them to diagnose specific weather situations.
11. Make basic temperature and precipitation forecasts using physical concepts learned in class.

Prerequisite(s): WX 327 Prerequisite is WX 301.

Required Course Materials

Text/Tool: No texts for purchase are required for this course

Optional Course Materials



Text/Tool: Synoptic Analysis and Forecasting

ISBN: 9780128092569

Authors: Shawn Milrad

Publisher: Elsevier

Publication Date: 2017-11-16

Assessment Activities

In-Class Activities and Homework

- You will have a total of **8–10 assignments (HWs/in-class activities) throughout the semester.**
- Combination of conceptual short-answer questions and map analysis/interpretation.
- Assignments are intended to help prepare you for the exams.

Case Study Project Presentation (last week of class)

- Select a relatively recent (since 2000) significant mid-latitude weather event; **no tropical cyclones**, unless it moved into the mid-latitudes and interacted with the jet stream.
- Prepare a qualitative meteorological analysis for a **10-minute oral presentation.**
 - You will work in **groups of 3 or 4 (TBD later in the semester)**

- I will provide you with specific instructions and a grading rubric **after Spring Break.**

Exams

- Two **on paper in-class** exams: Midterm and Final
- Each exam will be a combination of multiple choice, short-answer, and map analysis questions.
- Study guides will be posted on Canvas approximately one week before each exam.
- The final exam is **partially cumulative**; it is weighted toward material after the midterm exam.

Grading

- **Homework Assignments, in-class activities, attendance, and participation:** 30%
- **Midterm Exam:** 22.5%
- **Final Exam:** 22.5%
- **Case Study Project/Presentation:** 25%

Attendance will affect your grade in the following ways:

0 unexcused absences	+2.0% to final grade
1 unexcused absences	+1.5% to final grade
2 unexcused absences	+1.0% to final grade
> 6 unexcused absences	Loss of full letter grade

Final grades: *Strictly* rounded to the nearest whole number, i.e., 89.5 = “A,” but an 89.4 = “B.”

Letter Grade	Percentage
A	90 - 100%
B	80 - 89%
C	70 - 79%

D	60 - 69%
F	< 60%

University Policies

ACADEMIC INTEGRITY

Embry-Riddle is committed to maintaining and upholding academic integrity. Academic integrity violations include cheating, fraud, plagiarism, and double-submissions. More specific definitions of these violations and their consequences are described in the Dean of Students' [Honor Codes and Student Policies](#). To ensure fair and full achievement of degree requirements, students must prepare and present their own work. To show that they have completed their work with academic integrity, students should keep any drafts, notes, calculations, and the like.

Course Policies

1. **Seven or more unexcused absences** will result in an automatic **loss of one full letter grade**.
2. Completing the attendance quizzes as proof of attendance is the responsibility of the student.
3. Students must submit each excused absence in writing (email is acceptable) prior to the start of class (with the obvious exception of personal or family medical emergencies). Illnesses extending more than one class period require documentation from the university health clinic or other medical professional. University-sponsored events require written documentation. Examples of valid excuses are: illness, medical emergency, university-sponsored academic, professional or ERAU athletic events. Oversleeping, personal vacations, club events are not valid excuses.
4. **Please be on time**. If you are more than 10 minutes late, it may be counted as an unexcused absence.
5. Late homework will be docked one full letter grade (10%), unless the absence is excused in advance. Unexcused homework and labs over 1 class period late will not be accepted.

6. Make-up exams will not be given except for excused absences. Obtain verified excused absences from Health Services (7917) or Student Services Office (6326).
7. Academic dishonesty will not be tolerated and could result in dismissal from the University.
8. If you have any difficulties or special needs that hinder your learning in the class, please see me about providing accommodations needed to overcome your difficulties.
9. **CELL PHONES:** During class, please turn all cell phones to vibrate or silent, and **please refrain from checking email, Facebook, Instachat, Snapface, Tick Tock**, and any other app I am far too old to be aware of.
10. **COMPUTER/TABLET USAGE:** Computers are only to be used for in-class activities, following along with lectures, or when directed by the professor. Please refrain from checking/using/playing with email/social media/text chats/video games etc. during class. Yes, even Twitter.
11. **PERSONAL CONVERSATIONS:** Except for in-class activities or when directed by the instructor, personal conversations are prohibited during class, including cell phone conversations and text messages.

Student Resources

ACADEMIC ADVANCEMENT (A²) TUTORING CENTER

The [Academic Advancement \(A²\) Center](#) is your direct connection to academic support. The A² Center provides free tutoring and Supplemental Instruction (SI) to all students located on the first floor of New Residence Hall 3 (NH3) on the Daytona Beach campus. The A² Center provides peer led tutoring for foundational math, physics, engineering, biology, chemistry, and writing courses.

Please refer to the [A² Center website](#) for details and schedules.

Math Tutoring Lab provides students necessary resources to succeed in their 100- and 200-level math courses. Location: NRH3 Room 112

Physics Tutoring Lab offers free tutoring in their 100- and 200-level foundational engineering and aviation physics courses. Location: NRH3 Room 118

Engineering Tutoring Lab provides tutoring in foundational ES/EGR courses listed below. Location: NRH3 Room 113

- EGR 115 - Introduction to Computing for Engineers
- ES 201 - Statics
- ES 202 - Solid Mechanics
- ES 204 - Dynamics
- AE 201 - Aerospace Flight Vehicles

Chemistry & Biology Tutoring Lab provides tutoring within foundational chemistry and biology course listed below. Location: NRH3 Room 120

- General Chemistry I & II
- Organic Chemistry
- Biology I & II
- Anatomy & Physiology I & II
- Neurobiology

Weather Tutoring Lab is open Monday through Friday from 9 am to 5 pm and staffed with both virtual and face-to-face tutors who can help you with many meteorology, math and physics courses. The weather lab is located in COA 356.

The Writing Center provides student-led tutoring that adapts to the diverse needs of every writer. We are a teaching and learning service that fosters academic success through the development of independent thinking skills. Visit [Microsoft Bookings](#) to book a session now. Location: NRH3 Room 126

General Study Area encourages students to collaborate with their peers and form study groups at their convenience. Location: NRH3 Room 119

Computer Lab is open to all students and is equipped with standard academic university software and free printing. Location: NRH3 Room 117

The Aviation Learning Center (ALC) in the College of Aviation (COA 141) provides free tutoring on Aeronautical Science and Flight course related topics. Hours of Operations: Monday - Friday, 8 a.m. - 8 p.m.; Saturday 10 a.m. - 5 p.m.

The **ALC** offers access to ten Advanced Aviation Training Devices (AATDs) that are able to simulate both the Cessna 172S and the DA-42 VI, including the Garmin G-1000 avionics, and is equipped with training aids including aircraft components, cut-away instruments, cockpit procedure trainers, Flight Management Systems trainers, reference literature, and much more.

CAMPUS SAFETY & SECURITY

[Campus Safety & Security](#) officers are on duty 24 hours per day, 365 days a year. We strongly encourage students to report crimes, emergencies, or suspicious conditions to Safety & Security by calling the department's Communications Center at 386-226-6480. In the event of an emergency, call 386-226-SAFE (7233).

CANVAS HELP

When logged in to Canvas, click Help – located at the bottom of the global navigation on the left side. This menu has choices for Canvas Support that you can choose from:

- Search the Canvas Guides
- Canvas Support Hotline at 1-833-334-2831, available 24 hours a day, 7 days a week
- Chat with Canvas Support

COUNSELING CENTER

We know that university life at ERAU can be demanding. Balancing academics, work, athletics, finances, family, health, and social life can be stressful. You may experience challenges including struggles with your personal well-being. If you are needing support, the ERAU Counseling Center can provide a calm, friendly and supportive environment for students to address any issue or concern. Counseling is available to all currently enrolled DB students. Counseling is confidential and offered free of charge. They are located in the Wellness Center Complex, building 502 and can be reached at 386-226-6035. For more information about services and hours:

<https://daytonabeach.erau.edu/about/counseling>

**If you find yourself in an immediate mental health crisis, please call Campus Safety at 386-226-6480 or call 911.*

DIGITAL STUDIO

The [Digital Studio](#) offers free digital design tutoring. At the Digital Studio, tutors can assist students with any aspect of the digital design process, including document design, poster design, information visualizations, podcast recording, and video editing. The Digital Studio offers students access to the Adobe Creative Cloud, Final Cut Pro, and a variety of other software. Appointments can be made here: <https://erau.mywconline.com>. You must create an account in order to schedule an appointment. The Digital Studio is located in SU 431.

DISABILITY SERVICES

ERAU is committed to the success of all students. It is a University policy to provide reasonable accommodations to students with disabilities who qualify for services. If you would like to request accommodations due to a physical, mental, or learning disability, please contact the [Disability Support Services Office](#) at 386-226-7916 or by email at dbdss@erau.edu. Disability Support Services' administrative office is located in Building #500. Disability Support Services' Testing Center is located in the Annex Building, room 217 and can be reached at (386) 226-2903.

THE CENTER FOR FAITH AND SPIRITUALITY/CHAPLAINS OFFICE

The [Center for Faith and Spirituality](#) has five prayer and meditation rooms which are open to everyone from 6 a.m. until 10 p.m. There is also the Center for Faith and Spirituality Chapel located in the Center for Faith and Spirituality. There are two chaplains serving the Daytona Beach campus of Embry-Riddle Aeronautical University: Reverend David Keck and Father Tim Daly (Roman Catholic Chaplain). They work with students of all faiths as well as those from no faith tradition.

FOOD PANTRY

We believe access to food is a human right, accessible to every student. We are committed to educating and distributing aid to our Embry-Riddle community. The mission of the Food Pantry program is to support the academic success of students by providing supplemental food for those who are experiencing food insecurity. Students can apply for support through the [Food Pantry Request form](#). A time will be scheduled with the student once the request is received.

HEALTH SERVICES

The [Daytona Beach Health Services](#) clinic is located in Building 500 on the corner of Richard Petty and Clyde Morris Blvd. Health Services will assist students with their medical appointment scheduling, billing, and insurance questions. Health Services can be reached at 386-226-7917 or dbhealth@erau.edu. Health Services is staffed with registered nurses, a nurse practitioner, a physician, a physician assistant, a registered license dietitian, a Flight Medical Support Specialist, and an insurance specialist. When receiving services – whether in-person or virtually – students are required to bring/submit a current copy of their health insurance card. All students are seen and treated at Health Services regardless of their insurance.

HUNT LIBRARY

The Hunt Library is here to help you succeed with finding just the right information resources. For detailed research assistance, please contact [Ask a Librarian](#).

- Website: <https://huntlibrary.erau.edu>
- Email: library@erau.edu
- Phone: 386-226-7656 | 800-678-9428

INTERNATIONAL STUDENT & SCHOLAR SERVICES

International students with questions about I-20s, visas or other related services that assist with the maintenance of their status and immigration compliance should contact [International Student & Scholar Services](#) at 386-226-6579 or dbiss@erau.edu. For other international student related issues and questions such as health insurance, taxes, drivers' licenses, campus work authorization, please contact the International Programs Administration Office at 386-323-8133. Both offices are located on the first floor of New Residence Hall 3.

OFFICE OF DIVERSITY, EQUITY AND INCLUSION

The mission of the Office of Diversity and Inclusion is to advance the campus community's understanding, commitment, and respect for diversity, equity, and inclusion. Through providing and/or supporting education, mentoring, programming, advocacy, and outreach the office fosters an environment that is both beneficial and supportive for all

students, faculty, and staff. To learn more about the office, campus offerings and resources, visit the [Office of Diversity and Inclusion ERNIE page](#). Through reviewing the ERNIE page, you can learn ways our office and campus partners strive to create an institutional culture where diversity, equity, and inclusion are ingrained in our community. For additional information please contact diversit@erau.edu. Both the Office of Diversity and Inclusion and the Diversity and Inclusion Lounge are located on the first floor of the New Residence Hall 3 within the International Programs Suite.

STUDENT ATHLETE SERVICES

For student-athletes participating in a full schedule of practice, school, matches/games/meets, know that I am aware of the difficult schedule. Please use your available tutors and academic assistance as needed and offered through the Eagle Study Connection.

Faculty Athletic Representative (FAR)

James J. Pembridge, PhD

Email: pembridj@erau.edu

Phone: 386-226-7097

STUDENT GOVERNMENT

[Student Government Association \(SGA\)](#) proudly offers a variety of services to improve student life on campus. Through its four branches, SGA can fund student organizations, advocate for students, and carry out multiple projects. Besides giving students a voice on campus, SGA also provides students with information and entertainment through *The Avion*, Touch-N-Go Productions, and WIKD radio station.

TITLE IX

[Title IX of the Education Amendments of 1972 \("Title IX"\)](#) is a Federal civil rights law that prohibits discrimination on the basis of sex in education programs and activities. All public and private elementary and secondary schools, school districts, colleges, and universities receiving any Federal funds must comply with Title IX.

The Title IX Office oversees compliance of Title IX Sexual Harassment in accordance with Federal Regulations as well as incidents falling under the University Sexual Misconduct policy. Policy violations can include sexual harassment or sexual violence,

such as rape, sexual assault, sexual misconduct, sexual battery, sexual coercion, and stalking.

Anyone **may** report suspected or known violations directly to the Title IX Office. However, there are certain persons / offices who **must** report incidents to the Title IX Office (mandatory). Those are Campus Safety & Security, Dean of Students (or designee), Vice President of Human Resources (or designee). Please refer to the policy and/or contact the Title IX Office for more specifics related to filing a report.

[Title IX Office](#)

Contact information: 386/226-7971; 386/226-6677; 386/481-9131

Online form: dbtix.erau.edu

Email: dbtitle9@erau.edu

UNDERGRADUATE RESEARCH

Embry-Riddle strives to create a culture of knowledge discovery through research. The [Office of Undergraduate Research](#) engages undergraduate students in faculty-mentored research that is both faculty and student-led. Our mission is to provide a diverse set of opportunities for all undergraduate students to enhance their education through engagement in research, inquiry, innovation, and/or other scholarly projects.

VETERANS STUDENT SERVICES

Being a student veteran can result in a variety of complexities that might require accommodations. Complications with VA benefits disbursements, and other unforeseen military-related developments can complicate your academic life. Therefore, please consider making professors aware of your Veteran status and contacting Veterans Student Services.

[Veteran Student Services \(VSS\)](#) facilitates the transition of military-affiliated students from military culture to University life, supports their academic success through informative programming, and assists veterans, active service members, guardsmen, reservists, and military dependents in receiving their military educational benefits. The unit is staffed with qualified school certifying officials who deliver a broad range of services; while providing informal counseling to students using VA educational benefits. In addition, VSS works in collaboration with our [Student Veterans of America](#)

[chapter](#) and [Faculty-4-Veterans](#), who support the unit in addressing the needs of our military-affiliated students across campus. VSS, which is located in Building 509, can be reached at 386-226-6350 or dbva@erau.edu

WEATHER EMERGENCY STATEMENT

Hurricanes, tornadoes and other natural disasters (such as fires) are a part of life in Florida. In the event a natural disaster threatens our area, everyone at ERAU is expected to monitor voicemail, email, and the local media for any changes to the normal schedule, including evacuation plans. Decisions to close the Daytona Beach campus are typically made sometime in the afternoon on the day before the intended closure. In the event of an emergency during class hours, please listen carefully to directions from your instructor. If it becomes necessary to evacuate the classroom, we will gather at a designated meeting point away from the building and take attendance to ensure everyone is safe and accounted for. As part of the disaster preparedness process, it is strongly suggested that each member of the ERAU community enroll in the RAVE emergency notification system. If you have not done so, please sign up using the link provided on your ERNIE home page.

ERAU Coronavirus Updates

To help keep everyone at Embry-Riddle as safe as possible, we expect all students and employees to take personal responsibility by following these three steps:

- **Get tested *before* classes begin on Jan. 12.**

If you test positive, [follow U.S. Centers for Disease Control & Prevention \(CDC\) guidelines](#). Do *not* come onto campus. Stay away from others for five days. After that, you may resume normal activities, so long as you are asymptomatic and wear a mask for another five days. Pre-semester testing is your responsibility; results do not need to be reported to Embry-Riddle. [Testing and vaccination services](#) will be freely available on campus throughout the spring semester.

- **Wear a mask indoors at Embry-Riddle.**

Particularly in classrooms and during flight training, we expect you to [follow CDC mask guidelines](#), even if you have been vaccinated. Please be respectful of others, keeping in mind those who may be at increased risk. We are aware that many in our community stopped wearing a mask indoors last semester as the pandemic seemed to be easing up. Now, with the highly infectious Omicron variant on the rise, you should *plan to resume masking up indoors*.

- **Get vaccinated before the spring semester begins.**

Have your initial vaccination, second dose or booster shot if you have not already done so. If you have questions, [review the CDC's vaccine information](#).

Course Schedule

The following is a list of course topics in the approximate order that they will be covered. **Exam and case study presentation dates are written in bold.** Dates are subject to change slightly, as necessary.

- Meteorological Conventions
 - Time zones and Zulu/UTC
 - Units of measurement
- Surface observations
 - Instrumentation and measurements
 - Surface station plots
- METAR code and interpretation
 - Outdoor observation lab
- Upper-air observations
 - Radiosondes
 - Upper-air station plots
- **Friday February 18th: No class (out of town). Free 4-day weekend!**
- Upper-air charts
 - Drawing isopleths
 - Geostrophic and gradient wind

- Jet streaks
- Height, vorticity, and vorticity advection
- Movement and intensity of upper-tropospheric troughs and ridges
- Temperature advection
- Movement and intensity of lower-tropospheric cyclones and anticyclones
- Putting it all together: Diagnosing vertical motion
- **Midterm Exam: Wednesday March 9th, in class on paper. Review session in class Monday March 7th**
- Surface/sea-level pressure charts
 - Drawing isopleths
 - Thickness and temperature
 - Critical thickness and frozen precipitation
- Fronts
 - Types of fronts
 - Frontal analysis
- Analysis and forecasting using satellite and radar imagery
- Skew-Ts and sounding analysis
 - Review of skew-T diagrams and variables
 - Plotting skew-Ts
 - Physical interpretation of soundings
 - Types of soundings
- Warm-season forecasting in Florida: Sea breezes, thunderstorms, etc.
- **Case Study Group Presentations (in class): Final week of class (April 25th and 27th)**
- **Final Exam: Wednesday May 4th, 12:30-2:30 p.m., in class**

Summary of Important Dates

Date Due	Name (Link)	Event Type	Points
1/17	MLK Day	Holiday	
2/18	No class (out of town)	Holiday	
2/21	Presidents Day	Holiday	
3/14	Start of Spring Break	Holiday	
3/18	Last day of Spring Break	Holiday	
4/25	Case Study Project Presentations	Assignment	
4/27	Case Study Project Presentations	Assignment	
1/14	1/14 Attendance Quiz	Quiz	1
1/19	1/19 Attendance Quiz	Quiz	1
1/21	1/21 Attendance Quiz	Quiz	1
1/24	1/24 Attendance Quiz	Quiz	1
1/26	1/26 Attendance Quiz	Quiz	1
1/28	1/28 Attendance Quiz	Quiz	1
1/31	1/31 Attendance Quiz	Quiz	1
2/2	2/2 Attendance Quiz	Quiz	1
2/4	2/4 Attendance Quiz	Quiz	1
2/4	Assignment #1	Assignment	70
2/7	2/7 Attendance Quiz	Quiz	1
2/9	2/9 Attendance Quiz	Quiz	1
2/9	500 mb chart isopleth	Assignment	20

Date Due	Name (Link)	Event Type	Points
2/11	2/11 Attendance Quiz	Quiz	1
2/11	700 mb chart isopleth	Assignment	20
2/14	2/14 Attendance Quiz	Quiz	1
2/14	250 mb chart isopleth	Assignment	20
	Outdoor Lab	Assignment	40
3/9	Midterm Exam (in class on paper)	Exam	
2/16	2/16 Attendance Quiz	Quiz	1
2/23	2/23 Attendance Quiz	Quiz	1
2/25	2/25 Attendance Quiz	Quiz	1
2/28	2/28 Attendance Quiz	Quiz	1
3/2	3/2 Attendance Quiz	Quiz	1
3/4	3/4 Attendance Quiz	Quiz	1
3/4	Assignment #2	Assignment	60
3/7	3/7 Attendance Quiz	Quiz	1
3/21	3/21 Attendance Quiz	Quiz	1
3/23	3/23 Attendance Quiz	Quiz	1
3/25	3/25 Attendance Quiz	Quiz	1
3/28	3/28 Attendance Quiz	Quiz	1
3/30	3/30 Attendance Quiz	Quiz	1
4/1	4/1 Attendance Quiz	Quiz	1
4/1	SLP/Frontal Analysis	Assignment	25
4/4	4/4 Attendance Quiz	Quiz	1

Date Due	Name (Link)	Event Type	Points
4/6	4/6 Attendance Quiz	Quiz	1
4/8	4/8 Attendance Quiz	Quiz	1
4/11	4/11 Attendance Quiz	Quiz	1
4/13	4/13 Attendance Quiz	Quiz	1
4/15	4/15 Attendance Quiz	Quiz	1
4/18	4/18 Attendance Quiz	Quiz	1
4/18	Skew-T Plotting.	Assignment	35
4/20	4/20 Attendance Quiz	Quiz	1
4/29	Assignment #3	Assignment	50
	Final Exam	Assignment	100
	Midterm Exam	Assignment	100
	Case Study Project	Assignment	100