

# Geography 5940 Syllabus

Synoptic Meteorology Laboratory, Spring 2021

## Course Information

- **Course times** Mondays and Wednesday 9:35-10:30 a.m.
- **Location: Derby Hall 140 or [Zoom Classroom](#)**
  - Meeting ID: 966 4316 4699
  - Password: 695067
- **Credit hours:** 2
- **Mode of delivery:** Hybrid

## Instructor

- **Name:** Dr. Aaron Wilson
- **Email:** wilson.1010@osu.edu
- **Office location:** Scott Hall (West Campus) 171
- **Office hours:** Dr. Wilson's **online office hours** will be held Monday and Wednesday, 11:30a to 1:30p, and by appointment. **All office hours will be virtual** (via Zoom and the chat feature in Carmen): [Zoom Office Hours](#)

Meeting ID: 951 5154 0104

Password: 879693

Note: When using the zoom office hours, there will be a waiting room and I will address each student on a one-on-one basis. If the above times do not work for you, please email me to setup a meeting at a time that works for you.

- **Preferred means of communication:**
  - My preferred method of communication for questions is **email-wilson.1010@osu.edu**.
  - Class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](#) (go.osu.edu/canvas-notifications) to be sure you receive these messages. I check email regularly during weekdays and occasionally on weekends. I will respond quickly, at least within 24 hours. Please feel free to send class-related questions any time.



## Teaching Assistant

- **We do not have a teaching assistant for this class.**

## Course Prerequisites

Concurrent Geography 5900 or Atmos. Sci. 2940. This course precedes Geography 5941 in autumn.

## Course Description

The objective of the course is to introduce students to the various methods by which meteorological and weather information is gathered, measured, and displayed, for use in weather forecasting applications. Students will become familiar with methods of obtaining information, data, and weather forecasts using the Web, and learn how to perform basic meteorological analyses using web data. This training will facilitate weather map and web usage in more advanced synoptic meteorology courses and serve as a background of applied information for dynamic meteorology classes.

## Learning Outcomes

Specific aims of this course are to introduce:

- basic meteorological data collection and data coding methods,
- the displaying of that information on surface and upper air synoptic charts,
- the interpretation and forecasting applications of these charts,
- the methods of gathering and displaying information from weather radar and upper air soundings,
- the basics of satellite meteorology and interpretation of satellite-based weather images,
- the basics of numerical modeling and model output interpretation, and
- the basics of isobaric analysis, frontal analysis and plotting and analysis of thermodynamic diagrams.

## How This Online Course Works

**Mode of delivery:** This course is a **hybrid** course consisting of a combination of in-person and online instruction, where 50%-75% of the course materials, exams and regular interactions occur online. Our regularly scheduled classes take place each week on Mondays and Wednesdays from 9:35-10:30 a.m. in Derby Hall 140. The remainder of your work will take place in Carmen throughout the week.

Current as of 1-1-2021, the first **two weeks** of class (1-11 through 1-22) will be taught completely online with no in-person instruction. Based on university guidance following the first two weeks, we will either continue with online instruction only or switch to our hybrid arrangement. All lecture periods, whether in-person or online, will be recorded and made available on Carmen as soon as possible following our normal meeting times.

The first week's lecture periods will be delivered synchronously with the recording and a pdf copy of the presentation posted after our class period. Starting in Week 2, recorded lectures and corresponding presentation pdfs will be made available the week ahead for students to asynchronously watch the lectures before our normally scheduled class period. We will use the scheduled class periods to review the material and work on in-class assignments.

*If/when we switch to hybrid mode, I will divide the students into two cohorts and assign each cohort a class period (Monday or Wednesday) during which those assigned students may attend class in Derby Hall 140 during the normally scheduled times. These sessions will be recorded live and posted to Carmen as well.*

**Pace of online activities:** This course is divided into **weekly modules** that are released one to two weeks ahead of time. Students are expected to keep pace with weekly deadlines but may schedule their efforts freely within that time frame.

**Credit hours and work expectations:** This is a [2] credit-hour course. According to [Ohio State bylaws on instruction](https://go.osu.edu/credithours) (go.osu.edu/credithours), students should expect around [2] hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to [4] hours of homework (reading and assignment preparation, for example) to receive a grade of [C] average.

**Attendance and participation requirements:** Research shows regular participation is one of the highest predictors of success. With that in mind, I have the following expectations for everyone's participation:

- **Participating in online activities for attendance: AT LEAST ONCE PER WEEK**  
You are expected to log in to the course in Carmen every week. During most weeks you will probably log in many times. If you have a situation that might cause you to miss an entire week of class, discuss it with me *as soon as possible*.
- **Zoom meetings and office hours: OPTIONAL**  
All live, scheduled events for the course, including my office hours, are optional. I will post recordings of synchronous sessions for those who cannot attend.
- **Quizzes, In-Class Assignments, Exercises: TWO OR MORE TIMES PER WEEK**  
Concept quizzes will be assigned nearly each week and exercises (in-class and individual) will be routinely assigned. These exercises will be made available on Wednesday's following the normal class period and will be due the following Wednesday by 11:59 p.m. unless otherwise noted (See Carmen for all due dates).

# Course Materials, Fees and Technologies

## Required Materials and/or Technologies

- No Textbook is required.
- Students should purchase color pencils by week 3 (yellow, green, red, blue, at a minimum).

## Required Equipment

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection
- **Webcam:** built-in or external webcam, fully installed and tested
- **Microphone:** built-in laptop or tablet mic or external microphone
- **Other:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at [go.osu.edu/student-tech-access](http://go.osu.edu/student-tech-access).

## Required Software

**Microsoft Office 365:** All Ohio State students are now eligible for free Microsoft Office 365. Visit the [installing Office 365](http://go.osu.edu/office365help) (go.osu.edu/office365help) help article for full instructions.

## CarmenCanvas Access

You will need to use [BuckeyePass](http://buckeyepass.osu.edu) (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you can connect to Carmen at all times, it is recommended that you do each of the following:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](http://go.osu.edu/add-device) (go.osu.edu/add-device) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- [Install the Duo Mobile application](http://go.osu.edu/install-duo) (go.osu.edu/install-duo) on all your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at [614-688-4357 \(HELP\)](tel:614-688-4357) and IT support staff will work out a solution with you.

## Technology Skills Needed for This Course

- Basic computer and web-browsing skills
- [Navigating CarmenCanvas](https://go.osu.edu/canvasstudent) (go.osu.edu/canvasstudent)
- [CarmenZoom virtual meetings](https://go.osu.edu/zoom-meetings) (go.osu.edu/zoom-meetings)
- [Recording a slide presentation with audio narration and recording, editing and uploading video](https://go.osu.edu/video-assignment-guide) (go.osu.edu/video-assignment-guide)

## Technology Support

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

- **Self Service and Chat:** [go.osu.edu/it](https://go.osu.edu/it)
- **Phone:** [614-688-4357 \(HELP\)](tel:614-688-4357)
- **Email:** [servicedesk@osu.edu](mailto:servicedesk@osu.edu)

## Grading and Faculty Response

### How Your Grade is Calculated

Your grade will be based on three parts:

Content Quizzes (best 9 will count):	10%
In-Class Exercises (best 7 will count):	10%
Take-Home Exercises (best 10 will count):	20%
Exams (3; each worth 20%):	60%

See [Course Schedule](#) for due dates.

**Content Quizzes:** There is a content quiz that is due at the beginning of most weeks beginning in Week 3 (due Monday by 11:59 p.m.). These quizzes will focus on terminology and basic concepts from the course materials. Each quiz will be administered through Carmen and will have ~10 questions that are based on the lectures provided. These quizzes are assigned to encourage you to keep up with the presented materials for the course. ***There are no makeups for missed content quizzes and late submissions are not accepted.*** Please refer to Carmen for due dates. This is an individual assignment. There are 11 quizzes that will be assigned during the semester. You will get credit for the best 9 scores. Therefore, if you miss a quiz for any reason (you were ill, you forgot, you were away, etc.), a makeup will not be offered. This will be one of the lowest grades that will be dropped. This gives equal

treatment to everyone in the class. No additional makeups/extensions/do overs will be provided.

**In-Class Exercises:** In-class exercises are meant to be worked on during the designated class period and are generally due on Friday's by 11:59 p.m. EDT (unless otherwise noted by Carmen). Late submissions of in-class exercises are not accepted. There are 9 in-class exercises that will be assigned during the semester. You will get credit for the best 7 scores. In-class exercises will be given a grade although some may not be formally corrected - only collected to determine that the assignment work was completed.

**Take-Home Exercises:** The exercises require you to apply what you learn in this class. All exercises will be administered through Carmen and may require you to download the exercise, complete by hand (drawing maps, etc.), scan or photograph your completed work, then upload the completed exercise. Exercises will be assigned following class on Wednesdays and will be due the following Wednesday by 11:59 p.m., unless otherwise noted in Carmen. These are individual assignments, and each student must submit their own work. However, you may discuss the questions and work collaboratively. **There are no makeup exercises and late submissions are not accepted.** Please refer to Carmen for due dates. There are 11 exercises that will be assigned during the semester. You will get credit for the best 10 scores.

**Exams:** Examinations will be administered online through Carmen. All students will take the exams at the same time. This is an individual assignment. You are not allowed to discuss the questions with anyone. The exam is open book and open notes. Therefore, you can look at the textbook and your notes to answer the questions. Two Midterm exams have been scheduled during our normal class time with a Final during Finals Week.

- **Midterm 1 Exam** (Wednesday, February 17, 9:35-10:30 a.m. ET) will test all topics covered between Weeks 1 and 5.
- **Midterm 2 Exam** (Wednesday, March 24, 9:35-10:30 a.m. ET) will test all topics covered between Weeks 6 and 10.
- **Final Exam** (Wednesday, April 28, 10:30-11:45 a.m. ET) will mostly test all topics covered between Weeks 11 and 15 but may also include questions from earlier topics.

*You must be available on the date and time scheduled for these exams. They are being held during the regular class time of this class (for Midterms) and the standard Final Exam period based on University protocol, so you should not have any conflicts. I am letting you know at the start of the semester so that you can arrange your schedule accordingly. Barring extraordinary circumstances there will be no make-up exams. Written documentation will be required and verified before a make-up exam will be considered. Students must contact the instructor prior to any exam to be considered for a make-up exam.*

## Instructor Feedback and Response Time

I am providing the following list to give you an idea of my intended availability throughout the course. Remember that you can call [614-688-4357 \(HELP\)](tel:614-688-4357) at any time if you have a technical problem.

- **Preferred contact method:** My preferred method of communication for questions is email ([wilson.1010@osu.edu](mailto:wilson.1010@osu.edu)).
- My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your notification preferences ([go.osu.edu/canvas-notifications](http://go.osu.edu/canvas-notifications)) to be sure you receive these messages. I check email regularly during weekdays and occasionally on weekends. I will respond quickly, at least within 24 hours. Please feel free to send class-related questions any time.
- **Grading and feedback:** I will try to provide feedback and grades within **seven days** for exercises and exams. Assignments submitted after the due date will not be accepted.

## Grading Scale

93–100: A  
 90–92.9: A-  
 87–89.9: B+  
 83–86.9: B  
 80–82.9: B-  
 77–79.9: C+  
 73–76.9: C  
 70–72.9: C-  
 67–69.9: D+  
 60–66.9: D  
 Below 60: E

## Other Course Policies

### Discussion and Communication Guidelines

[Example: The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.]

- **Writing style:** While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using good grammar, spelling, and punctuation. A more conversational tone is fine for non-academic topics.
- **Tone and civility:** Let us maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm does not



always come across online. I will provide specific guidance for discussions on controversial or personal topics.

- **Synchronous sessions:** During our Zoom sessions I ask you to use your real name and a clear photo of your face in your Carmen profile. During our full-group lecture time, you may turn your camera off if you choose. You are always welcomed to use the [free, Ohio State-themed virtual backgrounds](https://go.osu.edu/zoom-backgrounds) (go.osu.edu/zoom-backgrounds). Remember that Zoom and the Zoom chat are our classroom space where respectful interactions are expected.

## Academic Integrity Policy

**Content Quizzes:** This is an individual assignment. There are no makeups for missed quizzes and late submissions are not accepted. Please refer to Carmen for due dates. There are 11 quizzes that will be assigned during the semester. You will get credit for the best 9 scores.

**In-Class Exercises:** These are individual assignments, and each student must submit their own exercise. However, you may discuss the questions and work collaboratively. There are no makeup exercises and late submissions are not accepted. Please refer to Carmen for due dates. There are 9 in-class exercises that will be assigned during the semester. You will get credit for the best 7 scores.

**Take-Home Exercises:** These are individual assignments, and each student must submit their own exercise. However, you may discuss the questions and work collaboratively. There are no makeup exercises and late submissions are not accepted. Please refer to Carmen for due dates. There are 11 take-home exercises that will be assigned during the semester. You will get credit for the best 10 scores.

**Exams:** You must complete the 3 exams yourself, without any external help or communication. You are not allowed to discuss the questions with anyone. The exams are open book and open notes. Therefore, you can look at the lecture material and your notes to answer the questions.

## Ohio State's Academic Integrity Policy

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the university's [Code of Student Conduct](https://studentconduct.osu.edu) (studentconduct.osu.edu), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the university's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."



The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the university or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university's *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

**If I suspect that a student has committed academic misconduct in this course, I am obligated by university rules to report my suspicions to the Committee on Academic Misconduct.** If COAM determines that you have violated the university's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- [Committee on Academic Misconduct](http://go.osu.edu/coam) (go.osu.edu/coam)
- [Ten Suggestions for Preserving Academic Integrity](http://go.osu.edu/ten-suggestions) (go.osu.edu/ten-suggestions)
- [Eight Cardinal Rules of Academic Integrity](http://go.osu.edu/cardinal-rules) (go.osu.edu/cardinal-rules)

## Copyright for Instructional Materials

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

## Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at [equity.osu.edu](https://equity.osu.edu),
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or email [equity@osu.edu](mailto:equity@osu.edu)

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

## Your Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. No matter where you are engaged in distance learning, The Ohio State University's Student Life Counseling and Consultation Service (CCS) is here to support you. If you find yourself feeling isolated, anxious or overwhelmed, [on-demand mental health resources](https://go.osu.edu/ccsondemand) (go.osu.edu/ccsondemand) are available. You can reach an on-call counselor when CCS is closed at [614- 292-5766](tel:614-292-5766). **24-hour emergency help** is available through the [National Suicide Prevention Lifeline website](https://www.nationalsuicideline.org) (suicidepreventionlifeline.org) or by calling [1-800-273-8255\(TALK\)](tel:1-800-273-8255). [The Ohio State Wellness app](https://go.osu.edu/wellnessapp) (go.osu.edu/wellnessapp) is also a great resource.



# Accessibility Accommodations for Students with Disabilities

## Requesting Accommodations

The university strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability including mental health, chronic or temporary medical conditions, please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with [Student Life Disability Services \(SLDS\)](#). After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services.

## Disability Services Contact Information

- Phone: [614-292-3307](tel:614-292-3307)
- Website: [slds.osu.edu](http://slds.osu.edu)
- Email: [slds@osu.edu](mailto:slds@osu.edu)
- In person: [Baker Hall 098, 113 W. 12th Avenue](#)

## Accessibility of Course Technology

This online course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations as early as possible.

- [CarmenCanvas accessibility](http://go.osu.edu/canvas-accessibility) (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- [CarmenZoom accessibility](http://go.osu.edu/zoom-accessibility) (go.osu.edu/zoom-accessibility)

# Course Schedule

Refer to the CarmenCanvas course for up-to-date due dates. Specific dates for this course schedule are subject to change.

Week	Date	Topic	Due Dates for Graded Assignments
1	M: 1/11/2021	Introduction	
		The National Weather Service - Organizational and Technology Overview.	
	W: 1/13/2021	ASOS; How weather data collection is done; AWIPS	
2	M: 1/18/2021	<b>NO CLASS (Martin Luther King Jr. Day)</b>	
	W: 1/20/2021	METAR/TAF Code and Translations	Assignment 1-NCEP
	F: 1/22/2021		In-Class 1 - METAR
3	M: 1/25/2021	Surface Synoptic Chart and the Station Models	Quiz 1
	W: 1/27/2021	Clouds and Cloud Types	Assignment 2-METAR
	F: 1/29/2021		In-Class 2 – Station Models
4	M: 2/1/2021	Map Analysis: Isobaric and Isothermal Analysis on Surface Synoptic Charts	Quiz 2
	W: 2/3/2021	Identification of Fronts on Surface Synoptic Charts	Assignment 3 - Surface Analysis of Station Models
	F: 2/5/2021		In-Class 3 – Identifying Fronts
5	M: 2/8/2021	The Pressure Tendency and Tendency Analysis	Quiz 3
	W: 2/10/2021	Review Assignments and Material for Exam 1	Assignment 4 - Surface Weather Map Analysis
	F: 2/12/2021		In-Class 4 – Isalobar Analysis

Week	Date	Topic	Due Dates for Graded Assignments
6	M: 2/15/2021	History of Upper Air Observations. Rawinsonde Network and Upper Air Data. The Upper Air Station Model and Plotting Station Models on Constant Pressure Upper Air Synoptic Charts	
	W: 2/17/2021	<b>Midterm 1</b>	Assignment 5 - Isallobaric & isothermal analysis
7	M: 2/22/2021	Using Upper-Level Constant Pressure Charts: 850 mb and Charts – Low Level Thermal Advection	Quiz 4
	W: 2/24/2021	<b>NO CLASS (Instructional Break)</b>	
	F: 2/26/2021		In-Class 5 – WAA/CAA
8	M: 3/1/2021	Uses of Upper-Air Constant Pressure Charts: Jet Stream Wind Analysis	Quiz 5
	W: 3/3/2021	The Thermodynamic Diagram – Contents, how to read and make simple calculations.	
9	M: 3/8/2021	Plotting Skew-T Diagrams and basic interpretation. Determination of Atmospheric Stability.	Assignment 6 - Upper-level Constant Pressure Charts / Quiz 6
	W: 3/10/2021	Radiosonde-based chart: Sfc-500 mb Relative Humidity; Precipitable Water' Freezing Levels.	
	F: 3/12/2021		In-Class 6 – Thermodynamic Diagram
10	M: 3/15/2021	Operational Forecasting Models: RAP, NAM, GFS, and Medium & Long-range forecasts	Quiz 7
	W: 3/17/2021	Model Output Statistic (MOS) - What are they and how to read MOS Output.	Assignment 7 - Thermodynamic Diagram (Humidity)



Week	Date	Topic	Due Dates for Graded Assignments
11	M: 3/22/2021	Zone Forecasts - What they are and how to format and write them. Thermal Advection Analysis on Low Level Charts	
	W: 3/24/2021	<b>Midterm 2</b>	
	F: 3/26/2021		In- Class 7 – Zone Forecasts
12	M: 3/29/2021	NEXRAD: Weather radar and meteorological data obtained from it. Characteristics of weather radar & echoes	Assignment 8 – MOS and Zone Forecasts/ Quiz 8
	W: 3/31/2021	<b>No Class (Instructional Break)</b>	
	F: 4/2/2021	<b>Conversion Day for Wednesday:</b> NEXRAD Radar Composite Summary Chart and symbols.	
13	M: 4/5/2021	Upper-level wind analysis: Making and using hodographs	In-Class 8 – Radar/ Quiz 9
	W: 4/7/2021	Meteorological Satellites: The GOES I-M and POES satellites, history; basic imagery & interpretation.	Assignment 9 - Manually Digitized Radar Summary
14	M: 4/12/2021	GOES Satellite Weather Interpretation: Identifying cloud types and other earth/atmosphere features.	Quiz 10
	W: 4/14/2021	Satellite Jet stream identification from satellites, identification of ridges and troughs	Assignment 10 - Hodographs
	F: 4/16/2021		In-Class 9 - Satellites
15	M: 4/19/2021	Numerical Weather Prediction Procedure and Processes	Quiz 11
	W: 4/21/2021	Final Exam Review (Synchronous)	Assignment 11 - Satellites
16	W: 4/28/2021	<b>Final Exam (10:00 a.m. - 11:45 a.m.)</b>	