



# SYLLABUS

# GEOG 1900/10186

Extreme Weather and Climate

Autumn 2021 (full term)

4 credit hours

In Person (Online up to 25%)

## COURSE OVERVIEW

### Instructor

Instructor: Dr. Stavros T. Constantinou

Email address: [constantinou.1@osu.edu](mailto:constantinou.1@osu.edu) (this is my preferred contact method)

Phone number: (419) 755-4335 (office)

**Office hours: Mondays and Wednesdays, 12:35-1:30 or by appointment. Virtual office hours via Zoom, and by appointment during weekdays, M-F.**

**No individual appointments are available during the weekend.**

**Note: There is no extra credit in this course, and please don't ask.**

### Prerequisites

### Course description

Surveys characteristics and processes of Earth's atmosphere and how it interacts with the planet's surface, oceans, and human activity. The course focuses on how these interactions work to produce extreme weather events and climate extremes and how they affect people. Prereq: Not open to students with credit for 1900H (120H), 2960 (220), 5900 (520), 120, or AtmosSc 2940 (230). GE nat sci phys course.

### Course learning outcomes

By the end of this course, students should successfully be able to:

#### Physical Science

1. Students understand the basic facts, principles, theories, and methods of modern science.
2. Students understand key events in the development of science and recognize that science is an evolving body of knowledge.
3. Students describe the inter-dependence of scientific and technological developments.
4. Students recognize social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

## General education (GE)

This course serves as a General Education (GE) curriculum Physical Science course.

#### Natural Science

##### Goals

Students understand the principles, theories, and methods of modern science, the relationship between science and technology, the implications of scientific discoveries and the potential of science and technology to address problems of the contemporary world

## HOW THIS COURSE WORKS

**Mode of delivery:** This course is in person. Up to 25% of the course maybe available online.

**Pace of online activities:** This course is divided into **weekly modules** that are released one week 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 **4-credit-hour course**. According to Ohio State policy ([go.osu.edu/credithours](http://go.osu.edu/credithours)), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average.

**Attendance and participation requirements:** Attendance counts for 5% of the course grade. During each class session, I will circulate an attendance sheet at the end of class. Please make sure you sign it before you leave.

**Office hours: OPTIONAL**

## COURSE MATERIALS AND TECHNOLOGIES

### Textbooks

#### Required

Aguado, Edward and Burt, James E. 2015. Understanding Weather & Climate. 7th edition. Upper Saddle River, NJ: Pearson Education Prentice Hall / Buy new \$209.75 used \$157.50. Rent new \$167.80 Used \$83.90 Digital format VitalSource (180 days) \$46.50.  
 ISBN 978-0-321-98730-3  
 ISBN 0-321-98730-6

#### Recommended/optional

Rand McNally. 2017. Goode's World Atlas, (23rd ed.) Chicago: Rand McNally/ new \$26.60 used \$20.00 (Optional). ISBN-10: 0-13-386464-2; ISBN-13: 978-0-13-386464-9 Other fees or requirements

## Course technology

### Technology support

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the Student IT Support.

#### **BuckeyeBar support is by appointment only.**

In an effort to support the health and safety of university faculty, staff, and students, we encourage you to reach out for remote assistance. When required, you can schedule an in-person appointment at <https://go.osu.edu/bbarmans>

Phone: 614-688-HELP (4357) is available 24/7  
 Email: [8help@osu.edu](mailto:8help@osu.edu) or [servicedesk@osu.edu](mailto:servicedesk@osu.edu)  
 Web: <http://go.osu.edu/it>

Necessary equipment you need to access materials on Carmen.

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed
- Microphone: built-in laptop or tablet mic or external microphone

### Technology skills needed for this course

- Baseline technical skills necessary for online courses
- Basic computer and web-browsing skills
  - Navigating Carmen <http://go.osu.edu/canvasstudent>
- CarmenZoom virtual meetings <http://go.osu.edu/zoom-meetings>

### 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

### Required software

- Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Full instructions for downloading and installation can be found at\_.

### Carmen access

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

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions ([go.osu.edu/add-device](http://go.osu.edu/add-device)).
- 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.
- Download the Duo Mobile application ([go.osu.edu/install-duo](http://go.osu.edu/install-duo)) to all of 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) and IT support staff will work out a solution with you.

## GRADING AND FACULTY RESPONSE

### How your grade is calculated

Grades will depend upon four exams, 14 quizzes, and attendance. Exams 1, 2, and 3 count 15% of the course grade, and Exam 4 (Final) counts 30%. The Quizzes component counts 20 percent of the grade, and they are of the fill-in the blank format. You will have a quiz with seven terms at the end of each chapter. Attendance counts for 5% of the course grade.

For planning purposes, there will be an exam at approximately every 2-3 weeks. A typical exam comprises 50 multiple choice questions. The dates of Exams are based on the previous time of offering the course in person and may be changed during the semester.

Each quiz will include seven or 8 terms and there is a quiz for each chapter. Given that the course covers 14 chapters, there are 14 quizzes. The quizzes are of the fill-in the blank format.

Letter grades will be assigned according to the university grading scale shown below on this syllabus.

ASSIGNMENT CATEGORY	POINTS	PERCENT
<b>Exam 1</b>	100	15
<b>Exam 2</b>	100	15
Exam 3	100	15
Exam 4	100	30
Quizzes	100	20
Attendance		5
<b>Total</b>	<b>100</b>	<b>100</b>

See course schedule below for due dates.

## COURSE SCHEDULE

Please refer to the Carmen course for up-to-date assignment due dates.

Week	Date	Period	Text Reference	Lecture Topic
1	8/25	1	Chapter 1, pp. 2-31	Composition and Structure of the Atmosphere
2	8/30	2	<b>Quiz 1</b>	
	9/1	3		
3	9/6	4	<b>Labor Day- no classes</b>	Solar Radiation and the Seasons
	9/8	5	Chapter 2, pp. 32-53	
4	9/13	6	<b>Quiz 2</b>	
	9/15	7		
5	9/20	8	Chapter 3, pp. 54-89	Energy Balance and Temperature
	9/22	9	<b>Quiz 3</b>	
	9/22			<b>Exam 1</b>
6	9/27	10	Chapter 4, pp. 90-119	Atmospheric Pressure and Wind
	9/29	11	<b>Quiz 4</b>	
7	10/4	12	Chapter 5, pp. 120-159	Atmospheric Moisture
	10/6	13	<b>Quiz 5</b>	
8	10/11	14	Chapter 6, pp. 160-189	Cloud Development and Forms
	10/13	15	<b>Quiz 6</b>	
	10/13			<b>Exam 2</b>
9	10/19	16	Chapter 7, pp. 190-215	Precipitation Processes
	10/21	17	<b>Quiz 7</b>	
10	10/25	18	Chapter 8, pp. 216-261	Atmospheric Circulation and Pressure Distributions
	10/27	19	<b>Quiz 8</b>	
11	11/1	20	Chapter 9, pp. 262-287	Air masses and fronts
	11/3	21	<b>Quiz 9</b>	
				<b>Exam 3</b>

12	11/8 11/10 11/11	22 23	Chapter 10, pp. 288-313 <b>Quiz 10</b> <b>Veterans Day-No classes</b>	Mid-latitude Cyclones
13	11/15 11/17	24 25	Chapter 11, pp. 314-353 <b>Quiz 11</b>	Lightning, Thunder and Tornadoes
14	11/22 11/24	26 27	Chapter 12, pp. 354-389 <b>Quiz 12</b> <b>Thanksgiving Break-no classes, 11/24-26</b>	Tropical Storms and Hurricanes
15	11/29 12/1	28 29	Chapter 15, pp. 446-473 <b>Quiz 13</b>	Earth's Climates
16	12/6 12/8	30 31	Chapter 16, pp. 474-513 <b>Quiz 14</b>	Climate Changes: Past and Future
			Chapter 13, pp. 390-421 Chapter 14, pp. 422-443 Chapter 17, pp. 514-527	Weather Forecasting and Analysis Human Effects on the Atmosphere Atmospheric Optics.
				<b>Exam 4 (Final), Wednesday 15 December 2021, 8:00 - 9:45 A.M.</b>

### Descriptions of major course assignments

Each Exam covers the preceding material on the syllabus. For example, Exam 1 covers chapters 1, 2, and 3.

**Description:** Each exam comprises 50 multiple choice questions.

There are 14 quizzes, one for each chapter. They consist of seven or eight definitions and they are of the fill-in the blank format. Study guides are on Carmen.

## Late assignments

Please make sure you take the Exams and Map Quizzes when they are published. Please refer to Carmen for due dates.

## 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

## Instructor feedback and response time

- **Grading and feedback:** Grades for Exams will post on Carmen.
- **Email:** I will reply to emails within **24 hours on days when class is in session at the university**.
  - **Email Decorum:** Professional communication is expected at all times; I will always treat you with respect in my communications, so we ask that you do the same. Please address me as Dear Dr. Constantinou in your emails and please include “GEOG 1900” in the subject line so that I know it is regarding class. The exception is if you are messaging me on Carmen, it will automatically let me know.
- **Discussion board:** I will check and reply to messages in the discussion boards every **24 hours on school days**.
- **Telephone:** (419) 755-4335 (office)

## OTHER COURSE POLICIES

### Discussion and communication guidelines



Please check Carmen at least twice a week for any postings regarding the class. All PowerPoint slides and other instructional materials will be on Carmen.

## **TWO LINKS TO MOST IMPORTANT UNIVERSITY DOCUMENTS**

<https://ugeducation.osu.edu/faculty-and-staff-resources#sample>

<https://mansfield.osu.edu/syllabus-statements.html>

Section or the entire documents are copied below.

### **Academic integrity policy**

#### **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, 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 web page ([go.osu.edu/coam](https://go.osu.edu/coam))
- Ten Suggestions for Preserving Academic Integrity ([go.osu.edu/ten-suggestions](https://go.osu.edu/ten-suggestions))
- Eight Cardinal Rules of Academic Integrity ([go.osu.edu/cardinal-rules](https://go.osu.edu/cardinal-rules))

## **OSU-MANSFIELD STATEMENT**

### **COVID Safety Guidance**

All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (<https://safeandhealthy.osu.edu>).

### **Student Learning Accommodation Process**

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. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: [mcgregor.40@osu.edu](mailto:mcgregor.40@osu.edu); 419 755-4304.

### **Student COVID-related Accommodation Process**

The university is committed to supporting students and program participants with COVID-19 based risk factors. Student Life Disability Services, in conjunction with the Office of Institutional Equity, will work with students who are vulnerable to complications from COVID-19 to ensure that they have the necessary resources to participate in university life as safely as possible. Ohio State students from any campus may submit a COVID-related accommodation request at <https://slds.osu.edu/covid-19-info/covid-related-accommodation-requests/>.

### **Academic Misconduct Statement**

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever

committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee via the Associate Dean's Office at the Mansfield campus. For additional information, see <https://oaa.osu.edu/academic-integrity-and-miscond...> and the Code of Student Conduct.

### **Drop/Withdrawal Statement**

It is the student's responsibility to know the deadlines for dropping a course or withdrawing from the University. Term drop and withdrawal deadlines can be found at [registrar.osu.edu/registration](https://registrar.osu.edu/registration) (click on the current term under "Important Dates" and scroll down to ADD/DROP/WITHDRAW DEADLINES). There are different drop/withdrawal dates for the various shortened sessions and full semester classes. If you receive financial aid, you should always talk with a financial aid specialist prior to adjusting your schedule. If you stop attending a course but do not drop it, you risk receiving a failing grade which could negatively affect your GPA and your financial aid status. You can call 419-755-4317 to set up an appointment with an academic advisor or a financial aid specialist.

### **Retention**

The Ohio State University-Mansfield is committed to the success of students. If you are having academic or personal difficulties, you can contact [MANS-retention@osu.edu](mailto:MANS-retention@osu.edu) for specific referral resources.

### **Mental health**

If you or someone you know are suffering from any of the stress, depression or any mental health conditions on the Mansfield Campus, you can learn more about the broad range of confidential mental health services available on campus by visiting <https://www.newdirectionsforlife.com/sap/> or calling (419) 529-9941. Their offices are located in Student Support Services, Ovalwood, Second Floor You can reach an on-call counselor when CCS is closed at (614) 292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-(800)-273-TALK or at [suicidepreventionlifeline.org](https://suicidepreventionlifeline.org)

### **Student Conduct and Non-Academic Behavioral Concerns**

The code of student conduct is established to foster and protect the core missions of the university, to foster the scholarly and civic development of the university's students in a safe and secure learning environment, and to protect the people, properties and processes that support the university and its missions. Students who violate faculty expectations may be subject to the code of conduct. For behavioral related concerns, contact Student Life at 419-755-4317 and ask for an appointment with the Assistant Dean, Student Success. As a responsible community member, do not allow others to act inappropriately and impact the community. Reports can be made at <https://cm.maxient.com/reportingform.php?OhioState...>

### **Discrimination**

The Ohio State University at Mansfield is committed to providing a learning, working and living environment that promotes personal integrity, civility and mutual respect in an environment free of discrimination of any type. This includes students creating a hostile environment for

other students. To file a complaint, go to the Office of Institutional Equity in Columbus (reports can be made at <https://equity.osu.edu/>).

### **Ohio State Mansfield Diversity Statement**

To learn more about diversity, equity, and inclusion and for opportunities to get involved, please visit:

- <https://odi.osu.edu/>
- <https://odi.osu.edu/racial-justice-resources>
- <https://odi.osu.edu/focus-on-racial-justice>
- <http://mcc.osu.edu/>
- <https://mansfield.osu.edu/current-students/student-life/diversity/>

### **Trigger warning for classes**

If needed, please take care of yourself while watching/reading any class material that disturbs you (leaving classroom to take a water/bathroom break, debriefing with a friend, contacting a confidential Sexual Violence Advocate at the Domestic Violence Shelter in Mansfield at 419-774-5840, or New Directions SAP at 419-529-9941 and contacting the instructor if needed).

### **Lyft**

Although we do have Lyft in Mansfield, we suggest you book well in advance as there are limited availability. Additionally, Ohio State Mansfield does not offer this as a service so students must arrange for pick up and pay for this service on their own. The area also has many taxi companies and a bus comes to campus.

### **Ohio State Mansfield Identity Affirmation Statement**

It is our intent to honor your name and pronouns if they differ from your legal or academic record. Please advise any instructors of this change early in the semester so that we can update class rosters with your preferred name and your correct pronouns. Additionally, please advise us of any updates to your name and/or pronouns throughout the semester so that we can correct our rosters accordingly. A formal name change request can be made through Buckeyelink.

### **Title IX and Sexual Misconduct**

Title IX makes it clear that violence and harassment based on sex and gender are civil rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find more information and the appropriate resources at [titleix.osu.edu/](http://titleix.osu.edu/). Reports can be made directly at <https://equity.osu.edu/>.

### **HOW TO REPORT**

Reports of sexual misconduct can be made to one of the following individuals:

Donna L. Hight, Ph.D.  
Assistant Dean, Student Success  
419-755-4317  
[hight.6@osu.edu](mailto:hight.6@osu.edu)

Campus Police  
419-755-4210 or 4346

Domestic Violence Shelter of Richland County  
800-931-7233

Notice of an incident to the officials listed above, other than the Domestic Violence Shelter or a counselor, is considered official notice to the university. You can expect reports received by these individuals to be investigated and properly resolved through administrative procedures. Information will be shared only as necessary with investigators, witnesses, and the accused individual. *The Domestic Violence Shelter and the New Directions Student Assistance Program (SAP) staff are considered confidential reporting resources. Every other faculty or staff member must notify the University of reports made.*