

Your Course

This is an online, asynchronous basic atmospheric science course designed to develop your personal understanding and appreciation of our dynamic atmosphere. The two primary functions of this course are:

- To provide you broad overview of the introduction to earth-Sun relationship, map, and elementary principles of atmospheric science, and
- To engage you in activities utilizing atmosphere as a universally accessible laboratory for everyone.



Your Instructor



Hari Kandel, PhD

Assistant Professor, Environmental-
/ Geo-Science, School of Natural
Resources and Environment, LSSU

Your Textbook

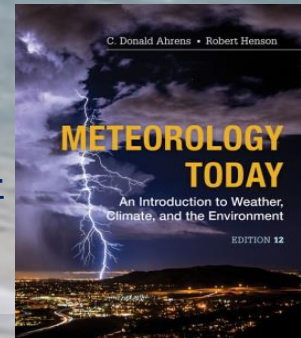
Required:

Meteorology Today: An Introduction to Weather, Climate, and Environment
Textbook by C. Donald Ahrens, and Robert Henson, 12th Edition, Cengage Learning, 2019, Boston, MA.

- An access code for digital learning solution MINDTAP, which contains mobile-ready text book with additional learning tools, video and other activities.

Publishers website:

[https://www.cengage.com/
c/meteorology-today-an-
Introduction-to-weather-
climate-and-the-environment-
12e-ahrens#](https://www.cengage.com/c/meteorology-today-an-introduction-to-weather-climate-and-the-environment-12e-ahrens#)



GEOG 108: Meteorology and Climatology Course Syllabus: Fall 2019 Lake Superior State University

***This syllabus provides pertinent information about class policies and expectations. You are responsible for reading it, understanding it, and following it.**

GEOG 108: Meteorology and Climatology,
College of Science and the Environment, LSSU

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I. Instructor's Information

About me:

I am a broadly trained geo-environmental scientist with a research focus in hydrology applying geospatial tools and models. I graduated my Ph.D. in geosciences from Florida International University in 2015, and M.S. in Geoscience and Geospatial Technology from Bowling Green State University, Ohio in 2010. I born, grew up, and got my studies up to M.Sc. in Nepal. About 4-years of high-school teaching in Nepal and about 8+ years of teaching at four different universities in various roles in US constitute my teaching experience. I am currently an Assistant Professor in the school of Natural Resources and Environment at Lake Superior State University. I teach courses in three programs: Geology (hydrologic systems, geochemical systems), Environmental Science (environmental science, physical geography, environmental chemistry), and Geospatial Technology (intro to GIS, intermediate GIS, geospatial analysis, and GIS programming and applications). I have been developing my academic curiosity in weather and climate since carrying out my dissertation research on land-atmosphere energy and water exchange during my Ph.D. I am excited about teaching this course online as I look forward to sharing some of the contents that I've learned during my PhD and skills acquired from the training courses on online teaching. **I believe that we learn and construct our knowledge through experiencing things and reflecting those experiences and that is what I expect you to do in this course: connect to the course resources and your outside atmosphere to experience, discuss, and analyze our real-world atmosphere.**

Contact Information:

- **Email:** hkandel@lssu.edu
- **Phone (office):** (906) 635-2618
- **Office:** Room 321, Crawford Hall, LSSU
- **On-campus office hours:** 3:00 pm – 4:00 pm Monday, and 9:00 am – 11:00 am Wednesday and Thursday. All the times are Eastern Times - US and Canada.
- My distance office hours will be held via our Moodle page in the morning hours of Monday and Friday.

II. Course Information

This is a 3-hour lecture and 2-hour lab course with 4-credits. Students completing this course earn natural science general education credit as well. See full course catalog description of GEOG108 here:

<http://webteam.lssu.edu/catalog/cmscatalog1819/course-desc.php#GEOG>

Prerequisite: MATH 088 or equivalent/satisfactory score on ACT or placement exam.

Course Learning Outcomes

Upon completion of GEOG108, a student will be able to:

1. Relate earth's movement and earth-sun distance to various climate types
2. Differentiate weather and climate processes and interpret weather maps
3. Describe how various atmospheric processes operate
4. Examine and/or interact with different weather events, and identify their potential causes
5. Critique literary work on topics related to global climate change and air pollution
6. Develop and apply skills for team work and group communication

General Education Objectives:

This course is designed to meet the Natural Science General Education Outcome. Students will be able to:

1. Incorporate empirical evidence in the analysis of the causes and consequences of natural phenomena including global climate change and air pollution

This course contributes to LSSU's Institutional Learning Outcome #1 by addressing:

1. **Formal Communication:** Students will develop and clearly express complex ideas of our atmospheric processes and climate mostly in written presentations. Students will use charts, maps, and other factual information to simplify complex concepts.

Instructional Environment and Strategies:

The course uses Moodle for online course delivery. Because this is an asynchronous online course, you work on your own without designated class meetings. Students who register in this course should fully understand the level of autonomy and self-motivation required to be successful in an online science course. This is a student-centered course that focusses on collaborative learning with the instructor acting as a facilitator. I will actively monitor student interaction and provide constructive feedback. Also as a facilitator, I guide you and help you through course material and answer questions about course subject matter. I am **NOT** Tech Support.

It is mandatory that you review the Student Moodle Orientation Course at:

<http://moodle.lssu.edu/course/view.php?id=23> prior to the start of the course. Select the Enroll me in this Course link on the left panel. Use your my.lssu.edu user id and password to log into Moodle. If you have any questions accessing Moodle please contact the Helpdesk using their email: helpdesk@lssu.edu or phone: (906) 635 - 6677.

This course requires a digital learning solution **MindTap** from Cengage. **MindTap** is available for purchase on its own, which I suggest you to go through MindTap Registration and Access link on the home page of our course Moodle.

Technology Requirements

- A computer with an updated operating system (e.g. Windows, Mac, Linux) and an updated web browser (e.g. Chrome, Firefox, Safari, Internet Explorer, Edge).
- Basic computer audio/video equipment
- Access to an internet based connection at DSL speed or better
- Antivirus software
- A media player such as Flash Player or Windows Media Player installed on your computer
- Microsoft word, excel, and Power point

III. Activities, Assessment and Grading

Activities/Assignment: Students will engage in a variety of online activities and scheduled assignments that might include reading information in the textbook or on the internet, tutorials, and PowerPoint presentations in Moodle, watching weather events video in internet, viewing video clips, and listening to audio files in Moodle. Students will be instructed on how to create discussion posts, videos, and photos to complete independent assignments, and to converse with other students in the course. I will direct you which practice exercise, homework, and case studies from MindTap will be due for a particular week. I may give exams, especially mid-terms, in the form of extended assignments or independent projects.

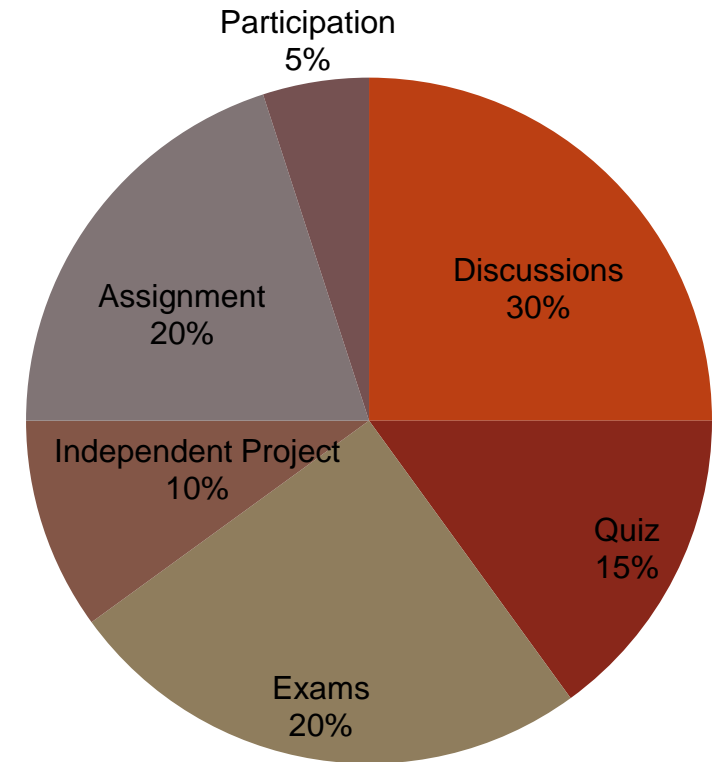
Important Note: Completion of all activities/assignments is self-paced; however, all assignments have firm deadlines.

Assessment: There will be six grading components and their percentage weight will be as shown in pie chart on the right:

Grading Scale: The letter grade will be based on following % range:

A+	97-100	C+	77-78
A	92-96	C	70-76
A-	89-91	D+	67-69
B+	87-88	D	62-66
B	82-86	D-	60-61
B-	79-81	F	<60

% Grade



Rubrics

Discussion Rubric:

The following major criteria will be used to grade discussion post. The percentage points and scale will be available in Moodle as a separate document.

- **Initial post:** complete, on-point, thoughtful, offers new ideas, connects it to the provided reading resources, postings demonstrate understanding of the material
- **Contributions to learning community:** puts effort to participate in learning community, shows interest and enthusiasm
- **Promptness and initiative:** responses to posts, and participation in discussion
- **Expression within the post:** opinions or ideas, connection to topic
- **Delivery of post:** rules of grammar, spelling, and evidence of careful review of post

Assignment and Activity Rubric

Other assignments will be graded based on following five criteria. The scale of percentage points for each assignment will be available in Moodle.

- **Completeness**
- **Accuracy**
- **Show of work**
- **Neatness and clarity**
- **Follow of instruction**

IV. Course Policies and Expectations

Attendance Policy:

Attending class, completing assignments on time, and keeping up with the class material is important for success in this course and in college. Note that 5% of your grade is for class attendance. I will track your attendance through Moodle log in. Minimum three times a week (Monday, Wednesday, and Friday) log in is mandatory. **Do not** wait for notifications to attend class.

Communication Policy:

24 hr. Window for Emails & Messages: Sunday through Thursday, I will respond to emails/messages within 18-24 hours (usually much faster, but understand that the window is up to 24 hours) - hence the importance of NOT procrastinating. Getting a response over the weekend will be hit-or-miss depending on what I'm doing. You know what is due well in advance; it's your responsibility to stay on schedule and prioritize your time. Don't wait until the last minute to message me about something that's due in a few hours or the next day because I may not get back to you in time.

Excuses:

Generally late or missed assignments will not be accepted, EXCEPT for pre-approved reasons as determined by the instructor. I will provide you feedback and grade your work within a week from the date of your submission. Works submitted late without pre-approval will be accepted until grading cutoff date with penalty of 5-10% grade points/day as determined by the instructor.

Time commitment:

I expect you to spend minimum of 12 hour/week (as per federal definition of credit hour) for this course including the times spent in reading, homework, writing for discussion forum and posting, preparing for quizzes etc.

Netiquette:

I expect you to follow the netiquette tips for online discussion. These tips are well explained in [this article](#)

- Use proper language
 - Be precise
 - Avoid emoticons and texting language
 - Be explanatory and justify your opinion
 - Tone down your language and control your temper
 - Recognize and respect diversity
 - Take your posts seriously
 - Be credible
- LSSU sanctioned travel related absences (athletics, conference presentations, conference attendance) are approved by the Provost. Instructors are expected to accommodate students in these situations according to [absent memo policy](#). However, students are expected to make arrangements with the instructor before the travel occurs. Failure to do so may result in “F” grades being assigned for the missed work.
 - Students are expected to perform all assigned work themselves unless otherwise noted. Any form of cheating or plagiarism will be handled in accordance with the University policy on Academic Integrity:
<https://www.lssu.edu/wp-content/uploads/2017/05/Academic-Integrity-Policy.pdf>
 - All courses at LSSU are required to provide the students with an educationally challenging culminating experience; typically referred to as a final exam. The final exam for this course is **scheduled on December 11, 2019**

V. University Policies and Resources

University Policies and Statements:

<https://www.lssu.edu/provost/faculty-resources/>

Online and Blended Course Attendance Policy

Students in online or blended classes are required to log in to the Course Management System (Moodle) and complete at least one “Academic Related Activity” within the Add/Drop period.

The Americans with Disabilities Act & Accommodations

Lake Superior State University is committed to following the requirements of the Americans with Disabilities Act Amendments Act and Section 504 of the Rehabilitation Act. This university is also dedicated to providing equal opportunity for participation in all programs, services and activities. If you are a student with a disability or think you may have a disability, please contact Accessibility Services, KJS Library #233, (906) 635-2355, accessibility@lssu.edu to discuss your request further. Once you have registered with Accessibility Services, students should contact their instructor as early as possible for assistance with classroom accommodations.

Academic Success Center

To support you on your academic path, the Academic Success Center (ASC) is free for all students and is located on the main floor of the library. The ASC offers walk in sessions for the math center, consultations with the writing center, and tutoring sessions by appointment. In addition, many classes offer supplemental instruction, which are group sessions tailored to your course content. Contact the Academic Success Center at academicsuccess@lssu.edu to set up an appointment

IPASS (Individual Plan for Academic Student Success)

The IPASS program assists students in developing an Individualized Plan for Academic Success. Students can initiate contact with IPASS on their own, or may be directed to do so by their advisor, by an instructor, by the Scholastic Standards / Financial Appeals Committees, or by the Provost's Office. If at mid-term your grades reflect that you are at risk for failing some or all of your classes, you will be contacted by a representative of IPASS. The IPASS program is designed to help you gain control over your learning through pro-active communication and goal-setting, through the development of intentional learning skills and study habits, and through personal accountability. You may email lakersuccess@lssu.edu if you would like to sign up early in the semester or if you have any questions or concerns.

Add/Drop Policy

Courses can be added or dropped through Anchor Access until the sixth day of the semester (fourth day for the Summer semester). After this date, students need the instructor's permission to add a course. For additional details about add/drop or withdrawal, go to:

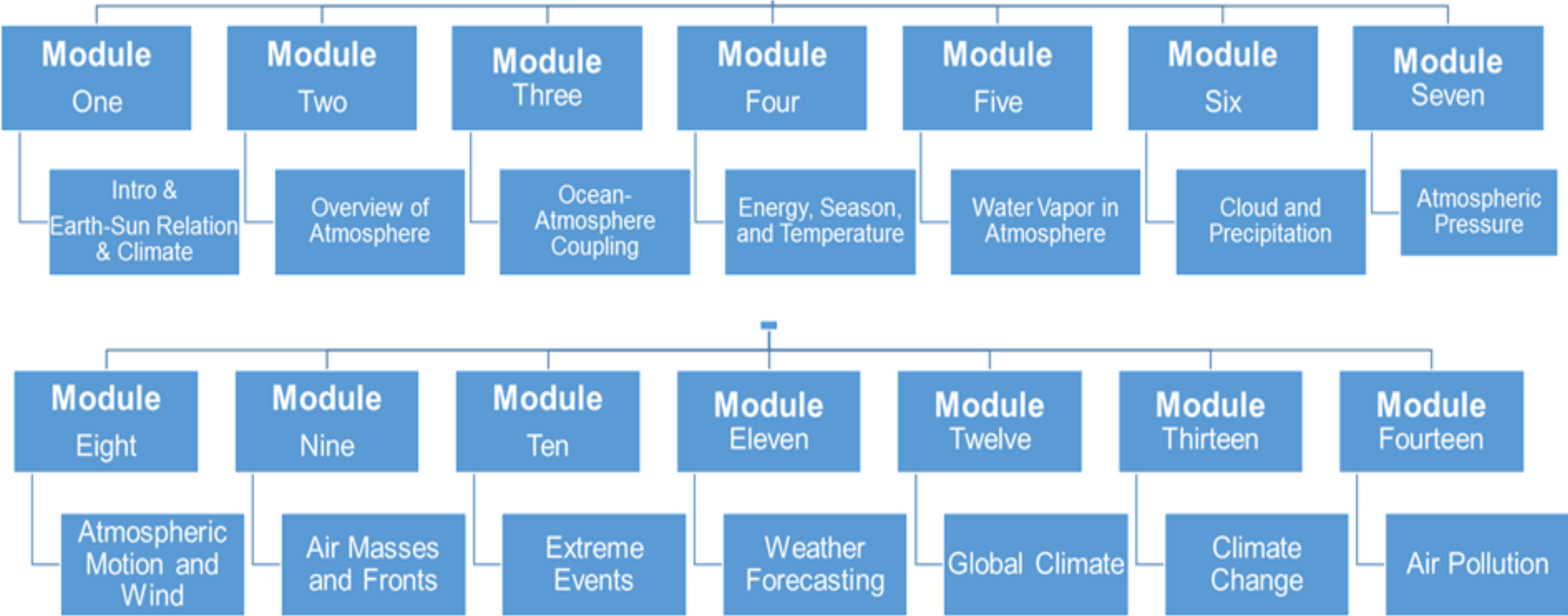
<https://www.lssu.edu/registrar/scheduling/adddrop-courses-withdrawal-information/>

VI. Tips for Success

1. Log into Moodle almost every day to make sure you see everything I provide to help with the class.
2. Follow your chapter/Moodle checklist line by line. Literally check items off the list as you complete them.
3. Skim the module first and go through resources and directed readings.
4. As you do your exercise, take notes in your own handwriting on paper.
5. Try to stay a few exercise ahead.
6. Make a good use of your group and partner and be a good partner. Meet on a weekly basis for a study or peer support.
7. I'm here for you! I'm just a click away, so message me from your course Moodle/e-mail. If you are on campus, stop by my office for help.

VII. Course Structure

The course will follow following modular structure. One module is equivalent to a week. The current structure and calendar activities represent a tentative schedule, I may modify these as the term progresses.



Course Calendar

Week : dates	Activity/Assignment	Due Dates (due by 11:59 pm ET)	Reference Book Chapters (or Sources)	Holidays (breaks)
1: 08/26-08/31	i) Introduction questions + syllabus quiz ii) topic discussion	i) 08/28, ii) 08/30	Online resources in Moodle	
2: 09/01-09/07	i) Discussion, ii) Assignment 1	i) 09/04, ii) 09/06	Ch. 1	09/02- Labor day recess
3: 09/08-09/14	i) Discussion, ii) Quiz 1	i) 09/11, ii) 09/13	Online + Ch. 10	
4: 09/15-09/21	i) Discussion, ii) Assignment 2	i) 09/18, ii) 09/20	Ch. 2	
5: 09/22-09/28	i) Discussion, ii) Assignment 3	i) 09/25, ii) 09/27	Ch. 4	
6: 09/29-10/05	i) Discussion, ii) Quiz 2	i) 10/02, ii) 10/04	Ch. 5, 6, & 7	
7: 10/06-10/12	i) Discussion, ii) Assignment 4	i) 10/09, ii) 10/11	Ch. 8 and online links	
8: 10/13-10/19	i) Discussion, ii) Assignment 5	i) 10/16, ii) 10/18	Ch. 9	10/14: Mid-semester break
9: 10/20-10/26	i) Discussion, ii) Activity 1	i) 10/23, ii) 10/25	Ch. 11 and online links	
10: 10/27-11/02	i) Activity 2, ii) Quiz 3	i) 10/30, ii) 11/01	Ch. 14, 15, 16 and online links	
11: 11/03-11/09	Assignment 6	11/10	Ch. 13	
12: 11/10-11/16	Assignment 7	11/15	Ch. 17, climate maps	
13: 11/17-11/23	i) Discussion, ii) Assignment 8	i) 11/20, ii) 11/22	Ch. 18, online links, article	
14: 11/24-11/30	11//26-12/01- Thanksgiving break			
15: 12/01-12/07	i) Assignment 9, ii) Quiz 4	i) 12/04, ii) 12/06	Ch. 19	
16: 12/08-12/14	Final exam, Course Survey	i) 12/11, ii) 12/14		