

# **School of Meteorology**

# <u>Undergraduate Handbook</u> <u>2025-2026</u>

Prepared by the Undergraduate Studies Committee

### **School of Meteorology Mission Statement**

We provide a world-class academic experience that promotes collaborative, innovative, and inclusive education and research opportunities in the atmospheric sciences with a positive impact on Oklahoma, the nation, and the world.

### **School of Meteorology Vision Statement**

Develop the School into a globally-engaged, student-centered atmospheric science program to advance the Nation's Weather, Water, and Climate enterprise by leveraging our strengths in research, education, and community engagement.

# **School of Meteorology Core Values**

We value **Breadth** in the backgrounds of the members of our community and in our approach to the pursuit of collaborative activities, as an essential component in defining the success of our mission.

We pursue **Excellence** in everything we do and define it as the unceasing dedication to the highest standards of our performance in the context of our abilities and available resources.

We employ *Creativity* in all our activities, with the ultimate goal of transforming our imagination into measurable, positive outcomes for all members of our community and our stakeholders alike.

We are *Transformative* in our efforts to make the School a place of belonging for people from all backgrounds, to improve the educational, scientific, and socioeconomic outcomes, and thereby change the lives of all members of our community.

Our approach to all activities is **Student-Centered** – we embrace and celebrate our opportunity to prepare the students in our program to become the next generation of leaders in atmospheric science.

# **Table of Contents**

| 1. DEGREES AND CURRICULUM   | 5        |
|---|----------|
| 1.1. BACHELOR OF SCIENCE, METEOROLOGY  1.1.1. General Requirements  1.1.2. Degree Requirements  1.1.3. Math Courses  1.1.4. Grade Requirements in Courses  1.1.5. Knowledge Expectations  1.1.6. Course Sequencing and Timing  1.2. ACCELERATED DUAL-DEGREE PROGRAMS  1.3. MINORS  1.3.1. Meteorology Minor  1.3.2. Weather and Climate Minor                 |          |
| 1.4. CREDIT HOURS AND WORKLOAD  |          |
| 2. ADMISSION AND PREPARATION FOR FIRST ENROLLMENT   | 12       |
| 2.1. PRE-COLLEGE PREPARATION  2.2. FRESHMAN ADMISSION  2.2.1. Admission to OU.  2.2.2. Admission to SoM.  2.3. TRANSFER ADMISSION.  2.3.1. Admission to OU.  2.3.2. Admission to the School of Meteorology  2.3.3. Transferring Courses  2.4. ADMISSION TO THE METEOROLOGY, B.S./M.B.A.  2.5. ADMISSION TO METEOROLOGY, B.S./DATA SCIENCE AND ANALYTICS, M.S. |          |
| 3. CODE OF CONDUCT  | 15       |
| 3.1. ACADEMIC INTEGRITY 3.2. NWC PROTOCOL 3.3. REPORTING 3.4. SAFETY  | 16<br>16 |
| 4. ACCESS AND OPPORTUNITY   | 19       |
| 4.1. Accessibility and Disability Resources 4.2. OU Resources and Opportunities   | 19<br>19 |
| 5. STORM CHASING POLICY   | 22       |
| 6. STUDENT SCHOLARSHIPS AND AWARDS  | 23       |
| 6.1. FINANCIAL AID  | 23<br>23 |
| 7. ADVISING, ENROLLMENT, AND MENTORING  | 27       |
| 7.1. ACADEMIC ADVISING  | 28<br>28 |

| 8. IT AND COMPUTING                                  | 31 |
|--|----|
| 8.1. PERSONAL COMPUTERS AND REQUIRED SOFTWARE        | 31 |
| 8.3. COMPUTER LABS                                   |    |
| 8.5. REMOTE ACCESS                                   |    |
| 9. STUDENT ORGANIZATIONS                             | 33 |
| 9.1. OKLAHOMA WEATHER LAB                            | 33 |
| 9.2. OU STUDENT CHAPTER OF THE AMS AND NWA           |    |
| 9.3. SOM STUDENT AFFAIRS COMMITTEE                   |    |
| 9.4. SCHOOL OF METEOROLOGY OUTREACH                  |    |
| 10. METEOROLOGY STUDY ABROAD EXCHANGE PROGRAMS       |    |
| 10.1. ELIGIBILITY                                    |    |
| 10.2. APPLICATION PROCESS                            |    |
| 10.4. FINANCES                                       |    |
| 11. CONFERENCE ATTENDANCE                            |    |
| 12. INTERNSHIPS, RESEARCH, AND EMPLOYMENT            |    |
| 12.1. INTERNSHIPS AND ACADEMIC CREDIT                | 38 |
| 12.2. FINDING AN INTERNSHIP                          |    |
| 12.3. STUDENT EMPLOYMENT                             |    |
| 12.4. RESEARCH AND ACADEMIC CREDIT                   | 39 |
| 13. CAREERS  | 41 |
| 14. RESOURCES FOR STUDENT SUCCESS                    | 43 |
| 14.1. NWC LIBRARY                                    |    |
| 14.2. ACADEMIC SUPPORT                               |    |
| 14.3. FURTHER RESOURCES                              | 43 |
| 15. NWC, CAGS, AND SOM ADMINISTRATION                | 45 |
| 15.1. NATIONAL WEATHER CENTER                        |    |
| 15.2. COLLEGE OF ATMOSPHERIC AND GEOGRAPHIC SCIENCES |    |
| 15.3. SCHOOL OF METEOROLOGY                          |    |
| 15.3.1. SoM Directors                                |    |
| 15.3.3. SoM Undergraduate Studies Committee          |    |
| APPENDIX 1. ACRONYMS AND ABBREVIATIONS               | 47 |

### 1. Degrees and Curriculum

The University of Oklahoma (OU) <u>School of Meteorology</u> (SoM) is one of three academic units within the <u>College of Atmospheric and Geographic Sciences</u> (CAGS), the others being the <u>Department of Geography and Environmental Sustainability</u> (DGES) and the <u>School of Aviation</u> (SoA). In all CAGS undergraduate programs, students complete a rigorous degree that has been designed to enhance their critical learning skills to prepare them to enter the workforce as a strong competitor or move onto graduate school.

### 1.1. Bachelor of Science, Meteorology

SoM offers a <u>Bachelor of Science in Meteorology</u> (Meteorology, B.S.) that can be earned in four years (eight semesters). Upon completing the program, students will:

- demonstrate knowledge of the fundamental principles governing the atmosphere and the characteristic atmospheric processes across spatial and temporal scales;
- apply critical and analytical thinking to solve scientific problems in individual and collaborative settings;
- effectively communicate information in oral and written form at an appropriate level for their audience;
- be equipped with the skills necessary to pursue a career across the Weather, Water, and Climate Enterprise and related fields, including the private sector, government, broadcast meteorology, graduate school, and beyond;
- be eligible for the rating of meteorologist given by the United States Civil Service Commission, e.g., meet the <u>Meteorology Series 1340 requirements</u> for the National Weather Service (NWS) meteorologist;
- demonstrate computational problem-solving skills, and participate in scientific research through a capstone experience;
- experience and network across the Weather, Water, and Climate Enterprise including those entities housed within the National Weather Center (NWC) and OU Research Campus;
- adopt the principles of proper ethical behavior; and
- understand the broader impacts of the atmospheric sciences on society.

#### 1.1.1. General Requirements

The Meteorology, B.S. degree has the following general requirements that fulfill OU's requirements for graduation:

- Minimum 120 credit hours must be earned toward graduation
- Minimum 40 General Education credit hours distributed among five core areas, with at least 3 credit hours of upper-division (courses numbered 3000+) General Education coursework completed outside the major
- Minimum 52 upper-division credit hours, with at least one course (minimum 3 credit hours) outside of the student's major
- Minimum 60 credit hours must be earned at senior (4-year) institutions
- At least 36 of the last 48 credit hours must be completed in residence at OU
- Minimum two semesters in residence in CAGS
- Minimum 2.25 GPA both overall and for major courses (for OU and combined with grades from other institutions)

## 1.1.2. Degree Requirements

All degree requirements, including an example semester-by-semester plan for completing the degree, can be found on the <u>Meteorology</u>, <u>B.S. checksheet</u>. Here we expand on the checksheet and provide further details on required courses, key milestones for progress in the degree, and course scheduling.

The Meteorology, B.S. degree requires 15 core courses (48 credit hours) described in the table below. Also included are the semester(s) that the course is offered. **Note that most METR courses are offered only once every academic year.** Students should consult the class schedule and check prerequisites when making course plans.

| Course    | Title  | Hours | Semester Offered |
|-----------|--|-------|------------------|
| METR 1003 | Introduction the Atmospheric Sciences        | 3     | Fall, Spring,    |
|           |  |       | Summer           |
| METR 2004 | Atmospheric Circulations                     | 4     | Fall, Spring     |
| METR 2213 | Physical Meteorology I: Thermodynamics       | 3     | Spring           |
| METR 2613 | Atmospheric In-Situ and Surface-Based        | 3     | Spring           |
|           | Measurements                                 |       |                  |
| METR 3113 | Atmospheric Dynamics I: Introduction to      | 3     | Fall             |
|           | Atmospheric Kinematics/Dynamics              |       |                  |
| METR 3123 | Atmospheric Dynamics II: Theory of           | 3     | Spring           |
|           | Atmospheric Flows                            |       |                  |
| METR 3223 | Physical Meteorology II: Cloud Physics,      | 3     | Spring           |
|           | Atmospheric Electricity/Optics               |       |                  |
| METR 3334 | Principles of Research & Communication in    | 4     | Spring           |
|           | Meteorology                                  |       |                  |
| METR 3513 | Atmospheric Chemistry in Weather and Climate | 3     | Fall             |
| METR 4133 | Atmospheric Dynamics III: Mid-Latitude       | 3     | Fall             |
|           | Synoptic-Scale Dynamics                      |       |                  |
| METR 4233 | Physical Meteorology III: Radiation and      | 3     | Fall             |
|           | Remote Sensing                               |       |                  |
| METR 4424 | Synoptic Meteorology Laboratory              | 4     | Fall             |
| METR 4433 | Mesoscale Meteorology                        | 3     | Spring           |
| METR 4523 | Climate and the General Circulation          | 3     | Spring           |
| METR 4913 | Senior Seminar (Capstone)                    | 3     | Fall             |

An additional 3 credit hour upper-level elective in meteorology, hydrology, or climatology must be chosen from the Meteorology Upper-Division Major Electives Course List. Students should consult their academic advisors and mentors (see Section 7) who can give guidance on which electives may be most beneficial for students' career goals and ambitions. The list below includes some of our regularly offered electives and the semester they are taught. Note that this list is not comprehensive of all electives offered.

- Fall Semester: METR 3523: Managing for a Changing Climate, METR 4533: Earth's Past Climate, METR 4663: Radar Engineering, METR 4713: Private Sector Meteorology
- Spring Semester: METR 3011: Broadcast Meteorology Practicum, METR 4403: Severe Thunderstorm Forecasting, METR 4443: Introduction to Tropical Meteorology, METR 4553: Climate and Renewable Energy, METR 4623: Radar Meteorology, METR 4743: Applications of Weather Forecasting

Free electives can be used to meet other requirements, including for minors, but they must include at least 9 credit hours of upper-division coursework to ensure the required 52-hours of upper-division coursework.

Furthermore, five courses (11-14\* credit hours) are required to support major courses.

| Course          | Title                                  | Hours | Semester<br>Offered     |
|-----------------|--|-------|-------------------------|
| MATH<br>2934*   | Differential and Integral Calculus III | 4     | Fall, Spring,<br>Summer |
| PHYS<br>1311    | General Physics Lab 1                  | 1     | Fall, Spring,<br>Summer |
| MATH<br>3413    | Physical Mathematics I                 | 3     | Fall, Spring,<br>Summer |
| METR<br>3323    | Statistical Meteorology or             | 3     | Fall                    |
| or MATH<br>4753 | Applied Statistical Methods            |       | Fall, Spring,<br>Summer |

<sup>\*</sup>See Section 1.1.3 on calculus sequences

Programming elective – choose one of the following courses:

| Course       | Title  | Hours | Semester<br>Offered |
|--------------|--|-------|---------------------|
| METR<br>1313 | Introduction to Programming for Meteorology              | 3     | Fall, Spring        |
| C S 1321^    | Java for Programmers                                     | 1     | Fall, Spring        |
| C S 1323^    | Introduction to Computer Programming for Programmers     | 3     | Fall, Spring        |
| C S 1324^    | Introduction to Computer Programming for Non-Programmers | 4     | Fall, Spring        |

<sup>^</sup> To enroll in one of these C S courses, students must take a placement quiz. After the quiz, students will be emailed in about a week with their results and course permissions.

CAGS also requires the following courses:

| Course     | Title  | Hours | Semester<br>Offered     |
|------------|--|-------|-------------------------|
| MATH 2924* | Differential and Integral Calculus II              | 4     | Fall, Spring,<br>Summer |
| PHYS 2524  | General Physics for Engineering and Science Majors | 4     | Fall, Spring,<br>Summer |

<sup>\*</sup>See Section 1.1.3 on calculus sequences

All majors must fulfill <u>OU's General Education requirement</u> of a minimum of 40 credit hours of <u>General Education ("Gen Ed") courses</u> in the following five core areas. Courses used for required major support may not be used to also fulfill OU's General Education requirements.

- Symbolic and Oral Communication
  - o English Composition, 2 courses, 6 credit hours

- Foreign Language\*\*, 2 courses, 6-10 credit hours
- o MATH 1914\*: Differential and Integral Calculus I, 4 credit hours
- Natural Science
  - o CHEM 1315: General Chemistry (with lab), 5 credit hours
  - PHYS 2514: General Physics for Engineering and Science Majors, 4 credit hours
- Social Science
  - PSC 1113: American Federal Government. 3 credit hours
  - Other (choose from Gen Ed course list), 1 course, 3 credit hours
- Humanities
  - o Artistic Forms (choose from Gen Ed course list), 1 course, 3 credit hours
  - HIST 1483: United States to 1865 or HIST 1493: United States, 1865 to the Present, 1 course, 3 credit hours
  - Other Western Culture (choose from Gen Ed course list), 1 course, 3 credit hours
  - o World Culture (choose from Gen Ed course list), 1 course, 3 credit hours
- First Year Experience
  - Any FYE course (choose from <u>Gen Ed course list</u>) including CAGS offered course AGSC 1513: Where the Land Meets the Sky, 1 course, 3 credit hours

\*See <u>Section 1.1.3</u> on calculus sequences

\*\*The Foreign Language requirement can be met by successfully completing two semesters of the same foreign language at the college level equivalent to two semesters at OU. It also may be satisfied by successfully completing two years of the same foreign language in high school or by demonstrating an equivalent level of competence on an assessment test.

Additionally, to fulfill the Upper Division Requirement, at least one of the courses (minimum of 3 credit hours) used to satisfy the General Education requirements must be at the upper division level and outside of the student's major.

### 1.1.3. Math Courses

The above tables and lists reference the 3-course calculus sequence consisting of

- 1. MATH 1914 (Differential and Integral Calculus I)
- 2. MATH 2924 (Differential and Integral Calculus II)
- 3. MATH 2934 (Differential and Integral Calculus III)

Each of these courses is 4 credit hours, for a total of 12 credit hours of calculus.

This sequence can be replaced with the 4-course calculus sequence consisting of

- 1. MATH 1823 (Calculus and Analytic Geometry I)
- 2. MATH 2423 (Calculus and Analytic Geometry II)
- 3. MATH 2433 (Calculus and Analytic Geometry III)
- 4. MATH 2443 (Calculus and Analytic Geometry IV)

Each of these courses is 3 credit hours, for a total of 12 credit hours of calculus.

Both sequences cover all the necessary material, and data over the last 5+ years shows no significant difference in outcomes for Meteorology students related to which calculus sequence they complete.

You must complete MATH 2934 or MATH 2443 no later than the Summer before you begin your junior year meteorology courses and MATH 3413 no later than Fall of your junior year meteorology courses.

### 1.1.4. Grade Requirements in Courses

All courses that are direct prerequisites for METR courses must be completed with a grade of C or better: This is often referred to as the "C-Rule". This includes the following courses:

- MATH 1823, 2423, 2433, 2443 or 1914, 2924, 2934
- MATH 3413
- PHYS 2514, 1311, 2524
- CHEM 1315
- METR 1313 or CS 1321 or 1323 or 1324

The C-Rule also applies to all core METR classes, except for those that are not direct prerequisites for other courses which currently includes METR 4913, 4433, and 4523.

# 1.1.5. Knowledge Expectations

All core METR courses in the curriculum have a set of knowledge expectations. These documents describe the principal concepts, technical skills, and fundamental understanding that all students are expected to possess upon completing specific courses. The knowledge expectations will be shared in each core class via Canvas.

### 1.1.6. Course Sequencing and Timing

To earn a Bachelor of Science in Meteorology, it is important that you are aware of prerequisites for all classes. These can be found via the <u>Bachelor of Science in Meteorology page</u>. As noted in the tables above, and with the exception of 1000-level courses and METR 2004, currently all METR courses are only offered once per year. As such, and due to the sequencing of courses that build upon each other, not obtaining the required C in courses (<u>Section 1.1.4</u>) can lead to the degree taking more than 4 years to complete.

The first Meteorology course in the curriculum is METR 1003 (<u>Section 1.1.2</u>). To enroll in this course, students must be also enrolled in at least Calculus I, either MATH 1914 or MATH 1823.

Freshmen students can take METR 1313 in the Fall or Spring, if they meet the minimum prerequisite of MATH 1523 (or equivalent or concurrent enrollment. Students may also take C S 1321, 1323, or 1324 to meet this requirement.

#### Important milestones

You must complete...

Your introductory programming course (METR 1313 or C S 1321, 1323, or 1324) and meteorology course (METR 1003) no later than the Summer before you begin your sophomore year meteorology courses.

PHYS 2524 no later than the Fall of your sophomore year meteorology courses.

MATH 2934 or MATH 2443 no later than the Summer before you begin your junior year meteorology courses.

### 1.2. Accelerated Dual-Degree Programs

Due to needs in the private sector for graduates with business and data science skills, and in collaboration with the <u>Price College of Business</u> and the <u>Gallogly College of Engineering</u>, respectively, SoM offers accelerated dual-degree programs ("4 + 1" programs) that enable students to earn a Bachelor of Science in Meteorology and a graduate degree sequentially in five years. Checksheets and semester-by-semester plans can be found at the following links.

- Meteorology, B.S./M.B.A.
- Meteorology, B.S./Data Science and Analytics, M.S.

Students can apply for these programs in their junior year. Students take all the courses required for the Bachelor of Science in Meteorology outlined in <u>Section 1.1</u>. In addition, they take courses that count toward both degrees in their fourth year and graduate courses in their fifth year. Details about admission to these programs can be found in <u>Section 2.4</u> and <u>Section 2.5</u>.

#### 1.3. Minors

A minor is not required as part of the meteorology degree program, but a variety of minors exist that complement a degree in meteorology. Some highly relevant and popular minors are listed below, although students can pursue any\* minor offered at OU, or none. If a student is planning on taking more than one minor, they should know that a given class cannot be used to satisfy requirements for two different minors. Minors are declared through the college in which they are offered.

- The <u>Broadcast Meteorology minor</u> is offered by the Gaylord College of Journalism and Mass Communication only to meteorology majors and is earned by taking 17 credit hours in communication courses concurrently with meteorology major courses. Students must complete the LST/AIT exams prior to enrolling in JMC 2033.
- The <u>Mathematics minor</u> offered by the Dodge Family College of Arts and Sciences can be earned by completing both MATH 4753 and a 4000-level math course as an upperdivision elective. A popular elective choice that also may support graduate school requirements is MATH 4163: Introduction to Partial Differential Equations.
- Students interested in the <u>Computer Science minor</u> offered by the Gallogly College of Engineering are recommended to take C S 1323 or C S 1324 to ensure they have the necessary prerequisites for later computer science courses.
- Students pursuing degrees in geographic information science and geographic information systems (GIS) use data to map, model, and analyze various problems related to geography and meteorology. A <u>Geographic Information Systems minor</u> is available through CAGS.
- The <u>Climate Adaptation minor</u> offered by CAGS explores climate change adaptation from an interdisciplinary perspective.

\*See Section 1.3.1 on Meteorology Minor and Section 1.3.2 on Weather and Climate Minor

#### 1.3.1. Meteorology Minor

CAGS offers a Meteorology minor that is not available to Meteorology majors. The Meteorology minor consists of 16 credit hours in meteorology courses, with 9 credit hours at the upper-

division level. Students taking courses for the minor must adhere to the course prerequisites as set by SoM. A minimum 2.25 GPA is required in all work presented for minor credit.

Required courses of Meteorology minor:

- METR 1003 Introduction to Atmospheric Sciences
- METR 2004 Atmospheric Circulations
- 9-hours of upper-division meteorology courses

#### 1.3.2. Weather and Climate Minor

CAGS offers a Weather and Climate minor that is not available to Meteorology or Geography majors. The Weather and Climate minor consists of 15 credit hours in meteorology and geography courses, with 9 credit hours at the upper-division level. A minimum 2.00 GPA is required in all work presented for minor credit.

#### 1.4. Credit Hours and Workload

Most METR courses are 3 credit hours. In general, this means either 3 x 50 minute class meetings per week or 2 x 1 hour 15 minute class meetings, with some exceptions.

In addition to in-class time, a student is **expected** to study for a minimum of 2 hours outside of class for every one hour spent in class. This includes studying for exams, completing homework or quizzes or projects, reading textbooks, rewriting notes, preparing for a lecture, etc. This is a federal requirement for credit hours.

For a 3 credit hour course, the average time spent per week is:

3 hours in-class contact hours 6–9 hours of independent work outside of class

# 9–12 hours per week total

Courses that do not have the required face-to-face contact time (for example, hybrid or online courses) still meet the total hour standard. For hybrid and online courses, the in-class and out-of-class hour divide would be different. The course covers the same material in the same depth as a face-to-face version of the same course.

If you take 15 credit hours in a semester, your total expected workload would be:

15 hours in-class contact hours

30–45 hours of independent work outside of class

45–60 hours per week total

# 2. Admission and Preparation for First Enrollment

### 2.1. Pre-College Preparation

No prior meteorology, atmospheric science, or climate knowledge is required upon beginning a Meteorology degree at OU. Your core courses are designed to introduce meteorological concepts and build upon them throughout the program.

In preparation for the curriculum, which necessarily requires math and physics courses, consider the course requirements (Section 1.1) and try to take classes in high school that will support them. Students will benefit by taking as many math courses as possible in high school, especially in algebra and calculus. Additionally, if your school offers them, take high school courses in physics, chemistry, and computer science. You can be successful in the program if you are unable to take these classes in high school, but it may require longer than 4 years (8 semesters), or several summer semesters, to complete your degree if you cannot begin the calculus sequence upon entering OU.

Students who have not completed two years of the same language in high school are required to take two college courses in the same language.

Furthermore, consider taking Advanced Placement (AP) or concurrent enrollment courses if available to you to earn college credit. Students who score 3 or above on an AP test may receive college credit. See OU's page on AP credit for more information.

OU awards college credit for certain College Level Examination Program (CLEP) subject examinations meeting minimum scores. See OU's page on CLEP credit for more information.

OU may award college credit to students who have taken higher-level courses in the International Baccalaureate (IB) Program and scored 4 or above on the course examination. See OU's page on IB credit for more information.

Gradually increase your study time in your courses and refine your time management skills. All of these actions help students prepare for college and the meteorology program.

### 2.2. Freshman Admission

#### 2.2.1. Admission to OU

Prospective students should visit <u>OU's Freshman Admissions page</u> for details on how and by when to apply to the University and what supporting documents must be submitted. Freshman Admission for the Fall semester proceeds according to the following deadlines:

- 1 August: Admission application opens
- 1 October: Free Application for Federal Student Aid (FAFSA) opens for Fall
- 1 November: Early action admission deadline
- 15 December: Final scholarship admission deadline
- 1 February: Final admission deadline

<u>OU is test optional</u>, which means that submitting ACT and/or SAT scores for admission is optional. When deciding whether to take and submit scores for these tests, consider how they will help you be competitive for <u>OU incoming student scholarships</u> (scores are encouraged for

scholarship consideration), if they will help your holistic application, and how they will help you place into accurate courses. ACT and/or SAT scores are not required for scholarships and tuition waivers awarded by SoM.

While there is no minimum GPA requirement for admission, high school GPA is the most significant factor in determining admission. Freshmen must meet the minimum high school curricular requirements for college preparatory (core) coursework, although a more rigorous selection is recommended, especially for math and science.

#### 2.2.2. Admission to SoM

#### There is no additional admission process for SoM.

Students can declare a Meteorology major when they enter OU, or at any time during their freshmen year, and non-transfer students can be admitted into CAGS when they complete at least 24 credit hours with a minimum 2.25 GPA.

#### 2.3. Transfer Admission

To be admitted to OU as a transfer student, you must have attended an accredited college or university and successfully completed at least 7 credit hours post-high school graduation. This excludes remedial (pre-college) work or credit hours earned while concurrently enrolled in high school.

SoM welcomes transfer students from junior colleges, community colleges, and other universities. Students preparing to transfer are encouraged to inspect the <a href="Meteorology, B.S.">Meteorology, B.S.</a> requirements (Section 1.1). It is recommended that transfer students visit CAGS in-person or virtually prior to choosing to come to OU. To schedule a visit, please email the SoM Academic Advisor (contact information at the end of this document).

It is important for transfer students to understand the commitment they are making and the potential careers available to them in meteorology and be familiar with this Undergraduate Handbook. It is important for all students to understand that the Meteorology degree program builds one class upon another; regardless of the amount of AP, dual credit, transfer, or prior degree, *it will take a minimum* of three years to complete this program as a transfer student (unless you are transferring from a meteorology bachelor of science degree program at another institution and already have completed sufficient coursework in it).

### 2.3.1. Admission to OU

See <u>OU's Transfer Admissions page</u> for details on how and by when to apply to the University and what supporting documents must be submitted. Transfer students with fewer than 24 non-remedial credit hours additionally must meet the direct from high school admission requirements.

Transfer Admission proceeds according to the following deadlines:

- 1 August: Fall and Summer application opens
- 1 October: Spring priority scholarship deadline
- 1 November: Spring application deadline
- 1 March: Summer/Fall priority scholarship deadline

- 1 April: Summer application deadline
- 1 May: Fall application deadline
- 1 June: Spring application opens
- 1 July: Fall documents deadline

OU offers several events that transfer students can attend. See the High School Seniors & Transfers section of the Events at OU page for event details and dates.

### 2.3.2. Admission to the School of Meteorology

Transfer students with at least 24 non-remedial credit hours must meet the requirement of at least a 2.5 GPA to be assured admission to CAGS. Upon admission to CAGS, initial advising for transfer students is done at the college level. During their first semester at OU, transfer students will be assigned an academic advisor (Section 7.1).

## 2.3.3. Transferring Courses

It is important to work with CAGS to ensure the best possible outcome when transferring classes in. To determine if and how classes will transfer to OU, the Office of Admissions and Recruitment will evaluate your credits. In the meantime, you can estimate what will transfer using the <a href="OU Transfer Equivalencies Database">OU Transfer Equivalencies Database</a>. Be aware that not every class will transfer smoothly. If there are courses that do not automatically transfer, students can obtain syllabi and have the course reviewed.

SoM encourages students to try to complete all calculus coursework at one institution. Therefore, if a student is going to start their calculus coursework at another institution, it is best for them to plan to complete all their calculus coursework there.

## 2.4. Admission to the Meteorology, B.S./M.B.A.

In collaboration with the <u>Price College of Business</u>, Meteorology majors can apply to the accelerated five-year <u>Meteorology</u>, <u>B.S./M.B.A. dual-degree program</u> about halfway through their junior year. Minimum admission requirements include:

- Undergraduate OU student majoring in Meteorology
- Maintain OU retention GPA and combined retention GPA of 3.0 or above
- Junior standing in Meteorology
- Successfully completed at least 12 credit hours of Meteorology courses at OU

The <u>initial Meteorology B.S./M.B.A. application</u> must be completed by February 15<sup>th</sup> of junior year.

- Spring sophomore year/Fall junior year: Representatives from the MBA office hold an information session with prospective/interested students. The information session covers the application process and MBA program requirements with all prospective applicants.
- Interested students submit the initial application electronically by February 15<sup>th</sup> of their junior year for Fall admission. This includes the online application form, a personal statement explaining your career goals and why you want an OU MBA, a current resume, and an unofficial OU transcript.
- The MBA office communicates with the applicant to acknowledge application receipt and briefly tells the applicant an overview of what to expect next.

- The Directors of SoM review and approve the application (e.g., to check that METR requirements are met).
- The MBA office then resumes communication with the applicant about their decision on moving forward with application review, potential missing entrance exam score, and timeline. The MBA office also will communicate the final admission decision with SoM.
- Students need to take the GMAT or GRE before the MBA admission committee can review their application. Students must email their GMAT or GRE score to the MBA office at oklahomamba@ou.edu by May 15<sup>th</sup> of their junior year.
- After the MBA admission committee review: The student will be contacted for an admissions interview (required for admission consideration).

# 2.5. Admission to Meteorology, B.S./Data Science and Analytics, M.S.

In collaboration with the <u>Gallogly College of Engineering Data Science and Analytics Institute</u>, Meteorology majors can apply to the accelerated five-year <u>Meteorology</u>, <u>B.S./Data Science and Analytics</u>, <u>M.S. dual-degree program</u> prior to their senior year. Minimum admission requirements include:

- Undergraduate OU student majoring in Meteorology
- Minimum OU retention GPA and combined retention GPA of 3.0 or above
- Successfully completed at least 12 credit hours of METR courses at OU
- Successfully completed prerequisite courses (MATH 1914, MATH 2924, MATH 3333, C S 1323, and C S 2334).

Most notable is the importance of the prerequisite courses, especially the freshmen-level programming course C S 1323, to set students on the right track for this program. Much of the M.S. program can be completed online.

The admission process should be completed by June 1<sup>st</sup> prior to senior year. Students submit a completed <u>Accelerated Program Application form</u> and the following documents to the Academic Programs Coordinator in CEC 409:

- "My Degree Navigator Record"
- Statement of purpose
- Two letters of recommendation from OU faculty/instructors
- Completed Accelerated Degree Graduate Coursework Plan (ADP)

#### 3. Code of Conduct

All students should be familiar with OU's Student Rights and Responsibilities Code of Conduct.

Enrollment in the University creates special obligations beyond that attendant upon membership in general society. In addition to the requirement of compliance with all applicable laws and regulations, the student assumes the obligation to comply with all applicable University and College regulations.

Faculty responsibilities, including academic responsibilities, are addressed in the <u>Faculty</u> Handbook.

# 3.1. Academic Integrity

It is OU's mission to create an academic culture that fosters student integrity both in and out of the classroom. Students must be familiar with the <u>Academic Integrity Code</u>, which always will be upheld in SoM.

#### 3.2. NWC Protocol

All students are required to abide by the <a href="NWC Protocol">NWC Protocol</a> while participating in any NWC and/or SoM-related activities within and outside of the NWC. Students and their guests must follow the expected behaviors such as being considerate and respectful of and collaborative with others and following OU's <a href="Student Rights and Responsibilities Code of Conduct">Student Rights and Responsibilities Code of Conduct</a> (Section 3). Examples of unacceptable behaviors are harassment, intimidation, and discrimination in any form. In cases where NWC policies are violated, the NWC Director, NWC security/local police, or any other applicable authority may take any necessary actions such as removing and prohibiting future attendance to NWC-related activities.

#### 3.3. Reporting

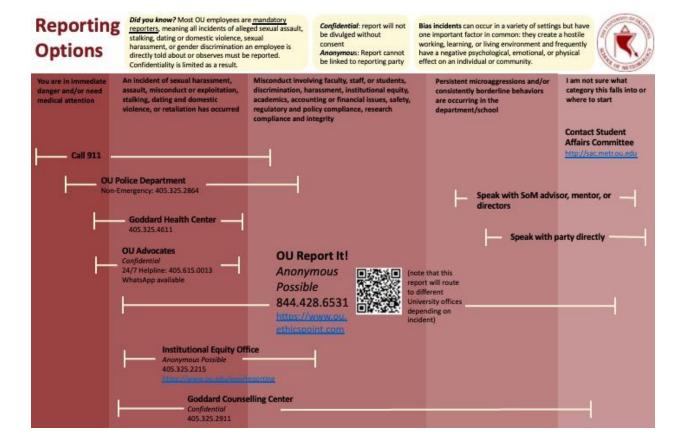
It is the responsibility of all potential parties or witnesses to an alleged violation of the Student Code of Conduct to participate in the conduct process. Students have a duty to cooperate and discuss the incident with appropriate University officials, adhere to stated deadlines, attend scheduled meetings, provide documentation as requested, and participate in all proceedings. Failure to meet these duties may result in a decision being made without the benefit of the student's participation or may result in a student being charged with failing to comply with the direction of a University official.

When a student witnesses any unexpected behaviors, such incidents should be reported by one or more of the following methods:

- 1. OU Report It! OU 24-Hour Reporting Hotline: Call 844-428-6531 or go online to OU Report It! Make a Report.
  - The OU Report It! hotline enables reporting of concerns related, but not limited, to: human resources, academics, safety, student affairs, accounting and financial, regulatory/policy compliance, institution equity, athletics, and research. You can also "Follow Up on a Report" via the OU Report It! Website.
- 2. OU Online Reporting of student conduct incidents, student housing incidents, hazing, concerning behavior, student tragedy, and sexual misconduct, harassment, and discrimination.
- 3. OU 24-hour Confidential Reporting Resources (OU Advocates): Call 405-615-0013.

Faculty and most OU employees are mandatory reporters. This means when they become aware of any alleged act of sexual assault, stalking, dating or domestic violence, sexual harassment, or gender discrimination, they must report the incidents to the <a href="Institutional EquityOffice">Institutional EquityOffice</a> (Norman Main Campus: 405-325-3546, Norman South Research Campus: 405-325-2215, <a href="ieo@ou.edu">ieo@ou.edu</a>).

SoM has created this helpful reporting infographic for how and where to report incidents.



### 3.4. Safety

# Safety in the NWC:

- 24/7 on-site OU Police Department (OUPD) Security Staff (405-325-1157).
- Best Available Refuge Areas during severe weather are located in NWC 1313 and NWC 1350.
- Public address system and phone/zone paging intercom system.
- Fire, tornado, and shelter-in-place drills are conducted annually.
- NWC Emergency Response Plan available in the CAGS Dean's Office.
- Blue lights are located around the facility with intercom to OUPD and radio contact with security guards.
- Defibrillators and bleeding control kits are located on each floor next to atrium elevators.
- A first aid kit is located at the Security Staff desk at the first floor main entrance.

<u>SafeWalk</u>: This free service provided by Housing and Residence Life utilizes resident advisors to accompany residential students on main campus.

- SafeWalk is available from 8 p.m. to 2 a.m., Sunday to Thursday. Call 405-325-WALK (9255) or use blue emergency phones.
- On Friday and Saturday nights, call the OUPD non-emergency number 405-325-1717 or 405-325-2864.

<u>SafeRide</u>: This program provides safe, free transportation to OU students within the designed Norman zone—no questions asked. SafeRide operates Thursdays, Fridays, and Saturdays from 10 p.m. to 3 a.m. during the program calendar.

# 4. Access and Opportunity

SoM is committed to providing a place where all community members are empowered to learn, research, and grow. We envision a fair, inclusive culture that intentionally supports SoM community members from all backgrounds, values their contributions, and integrates them into the scientific and educational experience, creating mutually beneficial outcomes for community members and activities alike.

### 4.1. Accessibility and Disability Resources

SoM works to comply with all federal laws and University policies. Students who require accommodations should work with OUs Accessibility and Disability Resource Center (ADRC).

We have partnered with the <u>NWC Library</u> to provide a satellite testing space for our students in the NWC.

#### 4.2. OU Resources and Opportunities

- OU Division of Access and Opportunity is dedicated to promoting opportunity and expanding access to higher education.
- OU Office of Advocacy and Education is dedicated to cultivating a safe and affirming
  environment for all students. Services include OU Advocates, the OU Food Pantry,
  gender-based violence awareness and prevention training, and overall wellness
  education.
- <u>International Student Services</u> provides services to international students including student visas and U.S. immigration regulations, as well as activities and programs to help students get involved in the international, OU, and local communities.
- OU's <u>Project Threshold and TRIO Center</u> focuses on increasing the retention and graduation rates of eligible program participants (first-generation, Pell grant eligible, and/or has a documented disability) through academic advisement and coaching, assistance accessing tutoring, assistance applying to scholarship, student success programming, computer lab access, and printing access.
- OU's <u>McNair Scholar program</u> prepares first generation and low-income undergraduate students for doctoral graduate programs. It is open to juniors and rising seniors from all majors, with preference given to students in science, technology, engineering, and mathematics.
- <u>LAMINAR</u>: LAMINAR strives to provide resources and connections to students, faculty, and staff in CAGS who are a part of the LGBTQIA+ community as well as their allies. Any undergraduate student is welcome to join.
- Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS):
   MANRRS promotes academic and professional advancement by empowering minorities
   in agriculture, natural resources, and related sciences. Any undergraduate student is
   welcome to join.
- The <u>OU Native Nations Center for Tribal Policy Research</u> is a research and policy institute situated within the Office of the President. They have breakfasts, information sessions, panels, workshops, and other events that may be of interest to any undergraduate student.

# 4.3. External Resources and Opportunities

Here we include some resources and opportunities external to OU that are available for students. This list is by no means fully comprehensive, and students should also explore the scholarships and awards presented in <u>Section 6</u> and the Resources for Student Success in <u>Section 14</u>.

### Funding and Research Opportunities:

- American Meteorological Society Scholarships and Fellowships
- National Weather Association Scholarships and Grants
- The National Science Foundation (NSF) <u>Significant Opportunities in Atmospheric</u>
  <u>Research and Science</u> (SOARS) is an undergraduate-to-graduate bridge and career pathways program designed to promote and support research, mentoring, and community in the atmospheric and Earth systems sciences. SOARS participants, called protégés, spend up to four summers doing research in atmospheric and related sciences. SOARS offers comprehensive financial support for summer research, including housing and transportation, and conference travel.
- The NSF Research Experiences for Undergraduates (REU) program supports intensive research by undergraduate students in any area of research funded by NSF, including atmospheric science. Students can apply to REU sites in the U.S. and worldwide. At each REU site, students work closely with faculty and other researchers to receive mentorship and build their professional network. REU offers financial support for summer research and, in many cases, assistance with housing, transportation, and conference travel.
- The <u>AGU Bridge Program</u> offered by the American Geophysics Union (AGU) increases opportunities for all students to obtain graduate degrees and create a network of peers, mentors and advisors to support and serve them before, during and after graduate school. The program is open to those who have not applied to graduate school or to those who have applied to one or more geoscience graduate programs but did not accept an offer or commit to a specific department/program in the current academic year.

### Affinity Groups and Organizations:

Many of the following groups also provide mentoring, networking, and scholarship opportunities.

- American Meteorological Society Education and Engagement Commission, which houses boards and committees that may be of interest to students and professionals, such as the Board on Student Affairs, the Board on Community Service, the Board on Outreach and Informal Education, the Board on Representation, Accessibility, Inclusion, and Diversity (BRAID), and the Student Conference Committee
- GeoLatinas, which welcomes all in the geoscience community at all levels
- <u>American Indian Science and Engineering Society</u> (AISES), which welcomes everyone who shares a passion for science, technology, engineering, and mathematics (STEM)
- <u>National Association of Black Geoscientists</u> (NABG), which welcomes undergraduate students in the geosciences in good academic standing as well as professionals
- Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), which welcomes all students and professionals
- <u>Latinos in Science and Engineering</u> (MAES), which welcomes all students and professionals
- Earth Science Women's Network (ESWN), which welcomes anyone
- Out in Science, Technology, Engineering, and Mathematics (oSTEM), which welcomes all students and professionals

Norman and Greater Oklahoma City Community Resources:

- City websites like the <u>City of Norman</u> and the <u>City of OKC</u> that include city news, meeting and community calendars and agendas, events, volunteer opportunities, boards and commissions, projects and initiatives, and information on recreation, arts, culture, and sports opportunities
- County websites including <u>Cleveland County</u> and <u>Oklahoma County</u>
- Tourism websites like <u>Visit Norman</u>, <u>Visit OKC</u>, and <u>TravelOK.com</u> that include information about restaurants, shopping, recreation, festivals, historical and cultural opportunities, sporting events, and more
- Local news including <u>OU Daily</u> and <u>OU Nightly</u>, <u>KGOU</u>, <u>The Norman Transcript</u>, <u>The Oklahoman</u>, KFOR, KOCO, News 9, KOKH, and others
- Chambers of commerce including <u>Norman Chamber of Commerce</u>, <u>South OKC</u>
   <u>Chamber</u>, <u>Greater Oklahoma City Chamber of Commerce</u>, <u>Greater Oklahoma City</u>

   <u>Hispanic Chamber of Commerce</u>, <u>Oklahoma City Black Chamber of Commerce</u>, and others
- Business guides including <u>OU Campus Corner</u>, <u>OU Daily Best of Norman</u>, <u>Keep It Local OK!</u>, <u>OKC Black Eats</u>, <u>Oklahoma Black-Owned Business Directory</u>, and Oklahoma Commerce <u>minority-owned</u> and <u>women-owned</u> business information, and others
- Libraries including Pioneer Library System and Metropolitan Library System
- Health and wellness including <u>Norman Regional Health System</u>, <u>Immediate Care of Oklahoma</u>, <u>Classen Urgent Care</u>, <u>Central Oklahoma Community Mental Health Center</u>, Cleveland County Wellness Square ("The Well"), Women's Resource Center, and others
- Transportation including <u>Campus Area Rapid Transit</u> (CART), <u>EMBARK Norman</u>, AMTRAK Norman, Greyhound Norman, and Will Rogers International Airport, and others
- Other area resources including <u>PFLAG Norman</u>, <u>Norman Pride</u>, <u>Norman Arts Council</u>, <u>Norman Firehouse Art Center</u>, <u>Urban League of Greater Oklahoma City</u>, <u>OKC Pride</u> <u>Alliance</u>, <u>Oklahoma Historical Society</u>, <u>Moore-Norman Technology Center</u>, and others

### 4.4. Reporting and Safety

The NWC is staffed by OUPD security officers 24/7 (405-325-1157), and all personnel are required to display OU or National Oceanic and Atmospheric Administration (NOAA) credentials at all times.

The reporting options infographic in <u>Section 3.3</u> includes information for reporting incidents of sexual misconduct, bias, microaggressions, and more.

# 5. Storm Chasing Policy

CAGS does not condone or encourage storm chasing by students. Anyone who chooses to chase storms does so at their own risk and should not imply that their activities are connected with the University. The only possible exception is when students are officially included in storm intercept activities conducted as part of well-planned and safety-trained scientific projects lead by faculty or scientists in the NWC research units. Storm chasing is not part of the SoM course curriculum nor should such activities take precedence over the academic activities of the School such as coursework and attending classes and seminars.

### 6. Student Scholarships and Awards

There are seven main ways meteorology majors can fund their college education:

- Financial aid
- OU-specific scholarships
- SoM tuition waivers
- Annual SoM student awards/scholarships
- External meteorology/atmospheric science, STEM, and other scholarships
- Student employment and internships (Section 12)
- Personal and family funds

The information and resources here are an introduction to common possible funding sources. They should not be considered comprehensive.

#### 6.1. Financial Aid

**FAFSA:** It is recommended for every undergraduate student to complete a FAFSA form every year, regardless of family income level, because many scholarships require a student to have a FAFSA form on file to be considered for that scholarship. More information about the FAFSA can be found through OU's <u>Student Financial Center</u> (SFC).

#### 6.2. OU-Specific Scholarships, Awards, and Tuition Waivers

**CASH**: The <u>Centralized Academic Scholarship Hub</u> (CASH) is where current OU students can apply for all merit and financial need-based OU scholarships. College scholarships, SoM tuition waivers (<u>Section 6.3</u>), SoM scholarships and awards (<u>Section 6.4</u>), financial aid scholarships, study abroad scholarships, Sooner Heritage Scholarships, Sooner Parents Scholarships, and campus awards all are housed in CASH. **It is important for every undergraduate student to complete a CASH application every year.** CASH applications generally are due February 1<sup>st</sup> each year. See the SFC's <u>CASH page</u> for details.

**CAGS** scholarships and awards: CAGS offers additional scholarships and awards. Other scholarships and awards exist through partner organizations within the NWC, including the Oklahoma Mesonet, Weathernews Inc., and the South Central Climate Adaptation Science Center (CASC). Students should regularly check their emails for announcements of these awards.

**WATW**: The Work Assistance Tuition Waiver (WATW) is designed to assist current undergraduate students that work 25+ hours per week during the academic year. The intent of the tuition waiver is to help these students with their finances so that they are able to work fewer hours during the semester and focus more time and energy on their studies. Students that receive the tuition waiver are not required to continue to work 25+ hours a week during the following semester.

#### 6.3. SoM Tuition Waivers

The **SoM Tuition Waiver Program** seeks to attract and retain highly qualified meteorology students. The program awards partial tuition waivers that help defray the cost of attending OU for residents and non-residents. The annual awards range from \$500 to \$5000 and are in addition to any other tuition waivers offered by OU. Around ten new awards are made each

year. The awards are typically renewed for up to four years as long as the student is a meteorology major and maintains at least 3.0 GPA at OU.

Initial awards are made based on the material submitted as part of students' application to OU (Section 2). All students who apply to OU and list Meteorology as their intended major by the scholarship consideration deadline are automatically considered for the tuition waiver program. A holistic approach is taken to making tuition waiver selections, and we look at all components of the application, including written statements. We look for students that show enthusiasm for meteorology, persistence, community and collegiality, adaptability, creativity, and commitment.

Tuition waiver awards are also made to outstanding existing and transfer students after their first year at OU when funds are available, based upon CASH applications.

**Needs-based School of Meteorology Tuition Waiver:** Each year, depending on funding availability, tuition waivers are awarded to students with financial need. This is *not* financial need as determined by a student's FAFSA. Students already receiving a tuition waiver from SoM or another source are eligible for this award, though the amount of support given via the scholarship outlined here will be limited to the remaining need of the student (i.e., outstanding tuition balance). Eligible students must have a declared major in Meteorology and apply when an email announcement for needs-based tuition waivers is distributed.

## 6.4. Annual SoM Student Scholarships and Awards

Each year, SoM presents several scholarships and awards to current students; these awards have typically been funded through the generosity of friends and alumni of SoM. Typically, awards are presented in April, and students receive a monetary award, a certificate, and for several of the awards their name on the SoM recognition wall in the NWC. All students must be in good academic standing to be eligible for an award.

## Awarded via CASH (Section 6.2):

- Droegemeier Endowed Scholarship for Excellence in Meteorology: Awarded to a full-time Meteorology major who has completed at least 45 credit hours of coursework (including AP but not transfer credits) at OU and has maintained at least a 3.5 GPA in their METR courses as well as direct prerequisites.
- **Dr Rex L Inman Memorial Scholarship**: Awarded to a full-time Meteorology student who has a 3.0 GPA and demonstrated financial need.
- Dr. Edwin & Lottie Kessler Memorial Endowed Scholarship in Meteorology:
   Awarded to a full-time undergraduate Meteorology major in their sophomore or above meteorology courses with a demonstrated financial need and a minimum of a 2.8 OU retention GPA.
- Eric Nguyen Memorial Scholarship: Awarded to a full-time Meteorology student who is
  making satisfactory progress toward graduation and needs supplemental financial
  assistance. Preference is for students who show an expressed interest in weather
  instrumentation and computing, or are actively involved in in developing and maintaining
  weather displays and visualizations, for example as part of the Oklahoma Weather Lab
  (OWL), or Hub of OWL Operational Technology (HOOT) Development Lab. Students
  much have a minimum 3.0 OU retention GPA.
- Forrest W. Johns Memorial Meteorology Scholarship: This award is given to a full-time Meteorology major based on the quantity and quality of a student's contributions to

- OWL. Those contributions include leadership, forecast skills, and overall participation. Student must have a 3.0 retention GPA and a 2.5 GPA in the major.
- Thomas J. Lockhart Memorial Scholarship in Meteorological Measures &
   Observing Systems: This award is given to a full-time Meteorology major who has
   attained at least junior status and who has demonstrated interest in meteorological
   measurements and observing systems, and in the development and use of standards for
   such purposes. Must have a demonstrated strong academic performance and
   demonstrate the potential to become an outstanding professional in meteorology.
- **Nicholas Nair Family Scholarship**: Awarded to a full-time Meteorology major with demonstrated financial need.
- **OU3 Memorial Meteorology Endowed Scholarship:** Awarded to a meteorology major in good standing, making satisfactory progress to graduation.
- Burre Family Endowed Scholarship: Awarded to a full-time regularly enrolled student in the School with junior or senior academic standing and a minimum 3.0 GPA. Priority consideration will be given to candidates who have attained a BSA Eagle Scoat rank or Girl Scout Gold Award; or are enrolled in the Air Force Reserve Officer Training Corps (AFROTC) or other branch of the Reserve Officer Training Corp (ROTC); or are involved in other leadership and/or community service activities.
- E.W. (Joe) Friday Endowed Scholarship: Awarded to a full-time female Meteorology major in their sophomore or junior meteorology courses. Criteria specifically include: completion of at least 45 credit hours of coursework and a minimum of a 3.2 OU retention GPA. This award is not selected by the SoM scholarship committee per OU rules.

# Awarded via faculty and staff nomination:

Students are encouraged to request nomination for these awards with their academic advisor, mentor, or other faculty and staff in the Fall semester:

- Faculty Recognition for Outstanding Performance as an Undergraduate: The criteria for selection for this award include GPA and extracurricular activities (such as jobs, volunteer work, committee work, etc.).
- SoM Directors Recognition for Outstanding Service to the Department as an Undergraduate Student: Presented to an undergraduate who has given freely of their time and talents to departmental activities (e.g. departmental tours, etc.). This may include a student very actively involved in groups such as OU SCAN.
- Outstanding Teaching Assistant: May be graduate or undergraduate teaching assistant (TA) from either Spring, Summer, or Fall of the previous calendar year.
- Tommy C. Craighead Award for Best Paper in Radar Meteorology: Presented to any
  OU student or recent graduate (May, August, December of previous calendar year) who
  is the lead author on a refereed journal article (preferably accepted but at least
  submitted) with a focus on radar studies of the atmosphere. The research described in
  the article should be of superior quality and deemed to exemplify the interdisciplinary
  nature of remote sensing of the atmosphere using radar.
- McCasland Award for Outstanding Undergraduate Research paper: Eligible submissions are published papers, submitted manuscripts, or nearly completed manuscripts from research projects, including capstone, from the previous calendar year.

Awarded based on academic performance:

- Undergraduate Academic Achievement Award Meteorology Junior with the Best Overall GPA
- Undergraduate Academic Achievement Award Meteorology Senior with the Best Overall GPA

# 6.5. External Meteorology/Atmospheric Science, STEM, and Other Scholarships

Also see Section 4.3 and Section 12.2 for additional opportunities with monetary awards.

- The American Meteorological Society (AMS) administers an array of undergraduate and graduate scholarships with the support of its members, corporations, and government agencies nationwide. The fellowships and scholarships help further the education of outstanding graduate and undergraduate students pursuing a career in the atmospheric and related oceanic or hydrologic sciences. Visit the AMS Scholarships and Fellowships page to learn more and apply.
- The National Weather Association Foundation (NWAF) awards scholarships and grants to undergraduate and, in some cases, graduate students majoring in meteorology or a related field. To learn more about the eligibility, application process, and due dates for each, visit the National Weather Association (NWA) Scholarships & Grants page.
- The **NOAA Hollings Undergraduate Scholarship** provides two years of academic assistance and summer internship at a NOAA facility. Applications are typically due in January each year. For eligibility requirements and application details visit the <a href="Ernest F. Hollings Undergraduate Scholarship">Ernest F. Hollings Undergraduate Scholarship</a> page.
- The Department of Defense (DoD) Science, Mathematics, and Research for Transformation (SMART) Scholarship-for-Service Program provides merit-based scholarships to undergraduate and graduate students pursuing degrees in science, technology, engineering, and mathematics (STEM) disciplines. Recipients receive full tuition, annual stipends, summer internships, and civilian employment with the DoD after graduation. Visit the DoD STEM Scholarships website for details.
- Pathways to Science is an excellent resource to search for scholarships, programs, and opportunities. See their <u>Undergraduate Summer Research Programs & Scholarships in STEM page</u>.
- Others: We also encourage all students to look to their local civic organizations, religious organizations, municipalities, employers, banks, insurance companies, etc. for scholarship opportunities. Even a small scholarship can make a big difference.

### 7. Advising, Enrollment, and Mentoring

The following are useful resources for planning and scheduling courses:

- <u>Degree Navigator</u>: Used to keep up with degree requirements (see <u>Section 1</u>) and track your progress toward graduation.
- iAdvise: Used for scheduling advising appointments in SoM and CAGS.
- One: Academic resources and course schedules.
- <u>ClassNav</u>: Course schedules, descriptions, and prerequisites.

### 7.1. Academic Advising

Academic advising is provided to all students to decide on majors and minors, select appropriate courses, and become acquainted with OU policies and resources. All students must be advised each semester to remove the advising hold from their account and be eligible to enroll in courses. Academic advising is one of the key components in reaching your goal of graduation. Your academic advisor is someone who can help you select a major and career, monitor your academic progress, provide information in designing, developing, and implementing individual academic plans, link you to resources in getting connected on campus and in the community, and more.

Students who are new to the University will be advised and enroll during New Sooner Orientation.

Once you are a student at OU, you will have a professional academic advisor in SoM. This advisor will provide quality guidance in creating an academic plan tailored to your interests and goals.

The advisor will assist in the selection of courses, provide specific information on degree requirements, and help map out a plan for completing your degree in an optimal time frame, as well as developing parallel plans. Advisors can also offer guidance on career pathways and other OU resources necessary for success.

- Advising for the Fall semester typically occurs in March.
- Advising for the Spring and Summer semesters typically occurs in October.
- Advising appointments are scheduled via iAdvise.
- Students are asked to check <u>Degree Navigator</u> and come to their advising appointment
  with a practice class schedule for the upcoming semester. Use the trial schedule
  template and/or the Build a Plan option in the enrollment system to create possible
  schedules to discuss with your academic advisor. This will also make it easier to enroll
  when your window opens.
- If any course overrides or special permissions are required for courses, advisors will provide information on how to obtain these. SoM can only provide permissions for METR courses.
- Once you have met with your advisor, they will remove your advising hold for enrollment.

SoM Academic Advisor – Elizabeth Lund (elund@ou.edu)

CAGS Director of Academic Advising—Brandi Moore (bm@ou.edu)

- Academic Advising Resource Center referrals
- Students on academic contract
- Degree checks and graduation clearance

#### 7.2. Enrollment

- 1. **Know when to enroll.** Check out your Enrollment Window and Registration Status on One. Mark your calendar with the day and time that your enrollment window opens.
- 2. Check for holds. Holds may keep you from enrolling during your Enrollment Window or impact other processes. You can check for holds by viewing Enrollment Windows and Registration Status on One.
- 3. Prepare for your advisement and be advised. See Section 7.1.
- 4. Plan your schedule. Use any materials provided by your academic advisor, the Trial Schedules you completed and discussed with them, and the Look Up Classes link found under the Academics tab on <a href="One">One</a> to find the courses you need and plan your schedule, including checking pre- and co-requisites.
- **5. Register for classes.** Click on the Enroll link under the Academics tab on One. Choose the term you'd like to register for and use your trial schedules to complete your enrollment. Click Submit Changes and you should see a screen appear with your course schedule. If you have a registration error, it will be listed on this screen as well.
- 6. Check your OU email following enrollment. Make sure you receive email confirmation from Enrollment Services the next day following each registration transaction. If you do not receive an email, your transaction was not processed. Contact the <u>Division of Enrollment Management</u> immediately for assistance at 405-325-3572. Please keep all emails regarding registration until you receive your Bursar's statement at the beginning of the semester.

#### 7.3. Mentoring

As discussed in Section 7.1, your academic advisor helps you select courses and guides you toward completing your degree. As a meteorology major, you also will have the opportunity for mentoring. A mentor does not only provide advice on curriculum issues and what courses to take. The late Morris Zelditch, an American sociologist, defined the six roles of mentors. Mentors, said Zelditch, act as:

- Advisors: People with career experience willing to share their knowledge
- Supporters: People who give emotional and moral encouragement
- Tutors: People who give specific feedback on your performance
- Masters, in the sense of employers to whom you might be apprenticed
- Sponsors: Sources of information about, and aid in, obtaining opportunities
- Models of the kind of person you should be as an academic scholar

Note that academic advisor is only one of the roles that a mentor might play during your undergraduate years and beyond. You will likely have many informal and formal mentors over the course of your degree, and we recommend using the following "mentoring map" from PROGRESS Mentoring Program to consider what *you* need to be successful and who can act as mentors in those areas.



# 7.3.1. School of Meteorology Mentoring Ecosystems

SoM students have the opportunity to be part of a mentoring ecosystem. Each ecosystem is a small group of undergraduate and graduate students as well as an ecosystem leader built around a shared interest or goal for the year. This system enables students to have individual meetings with a mentor and develop a network of supportive peers through group meetings or activities each semester. Ecosystem leaders are SoM faculty, adjunct or affiliate faculty, or research scientists. Students have the opportunity to be matched into a mentoring ecosystem through a survey. Ecosystem mentors can provide mentoring regarding internships, research, minors, coursework, networking, career guidance, study abroad, and more. Ecosystem leaders, rather than academic advisors, often are ideal people to provide letters of recommendation for jobs, internships, scholarships, and more.

# 7.3.2. External Mentoring Programs

Numerous national and international mentoring programs exist for students in meteorology/atmospheric science and STEM in general. Several groups and organizations listed in Section 4.3 provide mentoring programs in addition to those listed below.

- Mentoring365 is a mentoring program for individuals in the Earth and space sciences community. The program connects participants individually and in groups with professionals who can help them find a job by enhancing communication and leadership skills, exploring ESS disciplines, and building networks to successfully move their careers and education forward. Mentoring365 is founded by AGU, and AMS is a partner organization.
- <u>Earth Sciences Mentor Match</u> connects students with mentorship support to apply for fellowships and graduate school in the Earth sciences, including atmospheric science.
- The <u>AMS Private Sector Mentorship Program</u> helps advanced undergraduate students connect with professionals in private industry for information, advice, and professional career development.

- The <u>GeoLatinas Mentoring Program</u> provides mentees with support and advice concerning study organization, university life, professional careers, and work-life balance conflicts as well as knowledge sharing opportunities.
- The NWA sometimes holds virtual speed mentoring events.
- STEM Advancement for Community, Research, Education, and Development (SACRED) Program, which includes peer-to-peer mentoring through Mentorship Activated by SACNISTAs (MAS) and tailored mentoring through Research, Education, Development (RED).

### 8. IT and Computing

CAGS uses student technology fees to provide cutting-edge computer hardware, software, peripherals, media & customer support to encourage academic growth, innovation and collaboration.

SoM's Information Technology (IT) Team is here to help students, faculty, and staff with all of their computing and academic technology needs. They can be reached at <a href="mailto:metit@ou.edu">metit@ou.edu</a>.

All students should be familiar with OU IT's Information System Acceptable Use Policy.

Students should check their OU email at least daily. All important communications from SoM, CAGS, and OU will be via email.

It is <u>University policy</u> that all OU business conducted by email is to be done only through the OU-provided email system. Personal email accounts or non-OU email systems should not be used. Students should use their OU email for OU business, such as to email their instructors, teaching assistants, and OU offices.

#### 8.1. Personal Computers and Required Software

While having a personal computer is not required to complete a meteorology degree, it is very helpful. While the SoM IT team will support any computer, the recommended specifications are listed below.

- Minimum i7 Processor or better
- 16GB RAM
- 512GB Hard Drive (Solid State Drive SSD highly recommended)
- 1 GB Integrated Video (Discrete/Dedicated Graphics Card recommended)
- 802.11 n/ac Wireless
- At least 1 USB 3.0 Port
- Windows 10 or later (64 bit)
- MacOS 10.14: Mojave or later
- 3 Year Warranty (accidental damage highly recommended, not required)

**Can I use a Chromebook?** Chromebooks are not able to run the required software to complete assignments within the School of Meteorology.

University students can access Microsoft Office 365, including Microsoft Office apps, for free at <u>portal.office.com</u>, and download is available. Other office suites such as <u>Open Office</u> can read and write in the proper format and are available at no cost.

#### 8.2. Programing

Computer programming and visualizing data is an important part of meteorology, which is why all students must complete a programming course in their freshmen year (<u>Section 1.1</u>). Most meteorology classes that you will take for your degree will involve programing in **Python**. If you learn, or have learned, a different language in high school, computer science classes at OU, or another institution, do not be concerned or discouraged: The principals of programming are universal, and the School will assist with any transitions.

The recommended Python distribution is <u>Miniforge</u>. SoM IT may be able to provide limited support to getting this software and your needed packages installed and running if you experience trouble. Specific issues with class assignments should be addressed by the instructor or teaching assistant of the class first.

# 8.3. Computer Labs

There are multiple computer labs available to undergraduates in the NWC. Within SoM, there is the Linux lab located in NWC 5720 and computers in NWC 5401 (the undergraduate lounge). Students also can access computers in the NWC Library. The computers on the 5<sup>th</sup> floor are accessible with your SoM computing account (see <u>Section 8.4</u>). When using the Windows computers in the NWC Library, you must sign in with your OU 4x4 and password. Students will also have access to multiple computer labs across campus supported by OU IT.

# 8.4. Computing Accounts

Access to SoM computers requires a computing account. To request an account, complete the <u>SoM Computing Account Request Form</u>. Accounts are created as requests are received.

#### 8.5. Remote Access

Some resources are only available on the computers within the NWC. Undergraduate students can remotely access resources within the NWC from outside the building (e.g. from the dorms, main campus, or home residences). See the Remote Access portion of the <a href="SoM Resources">SoM Resources</a> <a href="page">page</a> for details about two methods of remote access. This access must be renewed every semester.

### 9. Student Organizations

SoM has a variety of student organizations that offer a supportive environment and a broad range of opportunities that include peer mentoring, professional and social activities, field trips, and guest speakers and panels. Note that, except for the Student Affairs Committee, you do not have to be a Meteorology major to participate in the organizations.

#### 9.1. Oklahoma Weather Lab

The Oklahoma Weather Lab (OWL) is a student-run forecasting office serving Key West, Florida and the state of Oklahoma. The lab hosts two shifts daily Monday through Friday and one shift daily Saturday and Sunday, all of which take place in a state-of-the-art forecasting lab in the NWC.

Shift leaders (undergraduate students, typically junior and seniors) spend time during each shift to teach new forecasting techniques, then guide students through forecasting temperatures, wind speed/direction, cloud cover, and precipitation for the region. Students will get the chance to learn techniques such as reading atmospheric soundings, analyzing observed conditions, and forecasting with model guidance. The OWL lab also comes equipped with AWIPS II, the same forecasting software used by the NWS, giving students an unparalleled opportunity to gain critical skills necessary for operational forecasting in a professional environment.

In addition, on weekdays, OWL features a broadcast shift for OU Nightly, OU's student-led local broadcast studio. During this shift, students have the chance to use the latest Baron software to create and present professional weather forecasts, giving students a fantastic opportunity to gain on-the-job experience in a supportive learning environment.

OWL also holds monthly workshops for students, which bring professional meteorologists and organizations to students in a friendly learning environment. Past speakers have included the WeatherBrains, Storm Prediction Center (SPC) and NWS forecasters, and Weather Channel presenters such as Jim Cantore.

OWL also includes the Hub of OWL Operational Technology (HOOT), which is OWL's development branch. Here, students can get practice developing new technology to support forecasting, including websites and data visualization. Information about OWL and HOOT is available on the OWL website.

#### 9.2. OU Student Chapter of the AMS and NWA

The University of Oklahoma Student Chapter of the American Meteorological Society and National Weather Association (OU SCAN) is an independent student-run organization at OU. The purpose of this organization is to provide educational, professional, social, and service opportunities for OU students interested in meteorology. The organization also provides community awareness regarding weather. OU SCAN accomplishes these purposes through monthly meetings held during the semester with speakers from the meteorology community and activities. OU SCAN also hosts numerous social and service events, including the Weather Friends, to conduct outreach at weather events, schools and more. This is the only student organization in SoM that has a small membership fee each year. Learn more about OU SCAN at the OU SCAN website.

#### 9.3. SoM Student Affairs Committee

The Student Affairs Committee (SAC) is a registered OU student organization. The purpose of SAC is to ensure formal, continual communication between faculty and students regarding SoM and CAGS issues of direct importance to both undergraduate and graduate meteorology students. In addition, SAC represents student opinions at faculty and Undergraduate Studies Committee meetings and enables student input on appropriate issues, including curricula changes, degree requirements, computing, and SoM outreach. SAC is comprised of both graduate and undergraduate students who are elected each academic year. SAC holds undergraduate town hall meetings in conjunction with SoM leadership to ensure continual communication and to collect feedback and concerns from students.

Undergraduates can hold several SAC positions including:

- Undergraduate Vice-Chairperson
- Secretary
- Treasurer
- International Representative
- Senior Representative
- Junior Representative
- Sophomore Representative

Learn more about SAC through the SAC website.

## 9.4. School of Meteorology Outreach

School of Meteorology Outreach (SoMO) is a registered OU student organization dedicated to providing educational outreach and safety activities on weather and climate to OU, Norman, and Oklahoma City metropolitan communities. SoMO members go on classroom visits, prepare and provide teacher and student resources, and participate in National Weather Festival and other events, fairs, and conferences. In a short amount of time, this organization has become very popular in our communities and is quite active! Learn more about SoMO through the <a href="SoMO">SoMO</a> website.

# 10. Meteorology Study Abroad Exchange Programs

As weather systems and climate patterns are not influenced by national borders, meteorology always has had a distinctly international flavor. Many of its operational and research activities are globally coordinated by the <a href="World Meteorological Organization">World Meteorological Organization</a> (WMO), a United Nations agency with headquarters in Geneva, Switzerland. As such, SoM students are encouraged to study abroad through any OU program, including in the summer. Students can explore study abroad opportunities on the <a href="Education Abroad website">Education Abroad website</a>.

SoM has exchange partnerships with the <u>University of Reading</u> in England and <u>Hamburg University</u> in Germany. Students from these institutions study in SoM, and our qualified Meteorology students can study abroad in the Spring semester of their junior year of meteorology classes.

Students who study abroad will receive 12–16 credit hours that semester, which typically equate to METR courses. The exact courses that they will receive credit for depends on the program, but all necessary core classes either will be taken at the institution abroad or accommodations will be made to take courses in a later semester at OU. In some cases, courses from the senior year sequence can be taken while abroad, which frees up hours for other courses. It is important to discuss your interest in studying abroad with your academic advisor and mentoring ecosystem.

Students interested in studying abroad should visit <u>OU Education Abroad</u> and speak with one of SoM's study abroad coordinators.

- Reading exchange program information, contact: Elinor Martin, elinor.martin@ou.edu
- Hamburg exchange program information, contact: Petra Klein, pkklein@ou.edu

### 10.1. Eligibility

SoM applicants must have a 3.0 GPA and must normally have passed the Meteorology, B.S. 1000- and 2000- level courses with grades of B or better. However, these are not always hard requirements, and students with an interest in studying abroad but who do not meet these criteria should meet with the faculty liaison for the program of interest.

#### 10.2. Application Process

Applications and selections for the Meteorology exchange programs are handled by SoM and OU's Education Abroad Program (application process). Students pay a \$50 application fee once they submit their application with OU's Education Abroad Office. A general information session about SoM exchange programs and the application process is held every year. Applications typically are due in September of a student's junior year but must be completed earlier if a student wants to be eligible for scholarships (see below). The appropriate faculty liaison for the program of interest should be listed as a reference on the Education Abroad application.

In addition to the online application with OU Education Abroad, SoM students also should contact the SoM faculty liaison of their chosen exchange program and send them an email with

- 1. A short statement why they want to study abroad (this can be the same as the Education Abroad application)
- 2. The names and contact information of two references

The SoM faculty liaison then will schedule a meeting with the student. After the meeting, the faculty liaison will send a formal recommendation to the Education Abroad office, which will review all materials and make decisions about the acceptance of the applicants. It is important to note that applications without the SoM recommendation letter are not processed by the Education Abroad office. A decision by Education Abroad is made in September, and a final decision is made by the SoM by November 1. Students performing poorly in their Fall courses may cause a reversal of an initial favorable decision.

### 10.3. Health and Safety

All study abroad students are automatically enrolled in study abroad student insurance through OnCall International for the duration of their program. Fees for this insurance are part of the program fee or are paid by the program participant prior to the program's departure. See the Study Abroad Insurance portion of Education Abroad's Heath and Safety page for details.

#### 10.4. Finances

Partner University programs charge OU students the same tuition and fees that they would normally pay for a regular semester at OU, and *many allow students to utilize their tuition waivers, scholarships, loans, grants, and financial aid.* Students should work with their study abroad advisor and <u>SFC</u> to make sure they are taking all necessary steps to pick a program that corresponds to their financial aid resources. Additionally, OU and Partners offer many scholarships specifically for studying abroad.

Those enrolling in less than 15 hours are eligible for a flat rate tuition waiver. OU Education Abroad also requires that all students participating in credit-bearing OU study abroad programs pay the international health and safety fee, which covers enrollment in OU's international health insurance plan, 24/7 risk management monitoring, and all other health and safety assistance provided. The cost of the international health and safety fee for a semester-long program is \$350. Students are responsible for pre-departure (e.g. passports and housing deposits) and transportation costs, as well as living expenses while abroad.

- Information about possible scholarships to fund study abroad can be found on Education Abroad's Money Matters page.
- Various study abroad scholarships are available through CASH, including the John T. Snow Study Abroad Scholarship for students in CAGS or the Mewbourne College of Earth and Energy. Scholarship applications for study abroad funds are due the year before students attend (i.e. sophomore year, typically February), and they must already have an application with Education Abroad to be eligible.
- The David L. Boren College of International Studies offers <u>internationally focused</u> scholarships for all majors, which includes opportunities for study abroad.
- The <u>German Academic Exchange Service</u> (DAAD) is a funding program for students studying abroad at German universities. Deadlines vary but typically are in January.
- <u>Butex Scholarships</u> are offered to those studying from or at a Butex Full Member Institution and typically is due in June.
- The Presidential International Travel Fund (PITF) helps cover average airfare costs.
- The U.S. Department of State's <u>Benjamin A. Gilman International Scholarship Program</u> supports students of limited financial means to study or intern abroad. To be eligible for the Gilman Program, applicants must be receiving a Federal Pell Grant during the time of application or provide proof that they will be receiving a Pell Grant during the term of their study abroad program or internship.

#### 11. Conference Attendance

Attending conferences of various professional organizations (e.g., AMS, NWA, AGU) can provide students with valuable networking and learning experiences, in addition to opportunities to demonstrate research.

Meteorology students can apply for travel funds to attend a professional conference, meeting, or symposium during their undergraduate career. The funding can be used to support flight costs, food, lodging, meeting registration, and other approved travel expenses. The number of students supported in a calendar year will be limited by the amount of available funds, with students who are presenting a talk or poster at a conference, as well as junior- and senior-level students, given priority when making funding decisions. Applications for travel funds through SoM are due at least 90 days before your trip.

Once you have received approval for your trip, you will work with SoM to book travel and make hotel reservations, if necessary. As many costs as possible will be paid for up front by SoM (e.g., conference registration, flights), but students will have to cover some costs out-of-pocket and will submit a form for reimbursement upon their return. To be reimbursed, students need to save the receipts from each transaction. It is important for students to remember that they will not be reimbursed beyond the amount for which they were approved.

Please be aware that the following restrictions apply when traveling with University funds: The University can cover economy airfare, shuttles, train, taxi, mileage to and from the airport, conference registration, per diem, and hotel but cannot cover souvenirs, room service, laundry services, or additional baggage fees beyond one checked bag. Exemptions can sometimes be made, but additional restrictions may apply. When in doubt about what may be covered, it is always better for students to stay on the safe side and assume that things will not be covered.

When participating in conferences and similar, students represent SoM, CAGS, OU, and any other organizations they are part of. Students must abide by the specific conference code of conduct as well as OU's Student Code of Conduct and the NWC Protocol (see Section 3).

## 12. Internships, Research, and Employment

### 12.1. Internships and Academic Credit

Meteorology students are encouraged to pursue internships. Internships cover a wide variety of experiences including broadcast meteorology, work with private sector companies, and summer research. They provide students with the opportunity to gain professional experience in their field of study and, in some cases, may lead to an entry-level position within the business or organization where the internship was performed. Although students are not required to seek academic credit for an internship, many internship employers require that students be enrolled in an internship course. Students may earn 1–3 hours of credit for a meteorology-related internship they complete at any time during the academic year, whether paid or unpaid.

**Please note:** Although an internship can be given 1–3 hours of academic credit, an internship will not carry degree credit toward the Meteorology, B.S. unless the student obtains permission from the SoM Director for the internship to fulfill a specific degree requirement.

To receive academic credit through SoM for an internship, a student must:

- Have a declared a major in Meteorology
- Have a minimum 2.0 OU and Retention GPA
- Submit the SoM Internship for Credit request form.
- If approval is given by the Associate Director for Undergraduate Studies, enroll in METR 3890. Typically, the Associate Director for Undergraduate Studies will act as the instructor for this course.
- Satisfactorily complete the requirements set forth by the instructor of the course in the time agreed upon.

Approval must be given before the internship begins, so make sure to take these steps in a timely way.

METR 3890 is S-U graded, meaning Satisfactory and Unsatisfactory, respectively. To receive a satisfactory grade and academic credit for your internship:

- You are required to submit one paragraph long weekly reports to document your progress in the internship.
- At the end of the internship, you must submit a 3–4 page report to the internship instructor that includes:
  - The nature and scope of the work you performed
  - What you learned and how it relates to your education at OU
  - How the internship experience has affected your career plans
- The instructor also will request that your internship supervisor provide a written evaluation of your job performance at the completion of the internship.

## 12.2. Finding an Internship

Institutions and companies send listings to OU that are distributed among the students; students should carefully read the CAGS Monday Memo and emails from student coordinators to see these listings (see also Section 12.3 for student employment). Students can find internship resources on OU's Career Center website, the CAGS Job Board, the AMS Intern Board, and job boards from other institutions and organizations. Students also may seek internships directly with a company or business.

Some national internship programs are listed below, but many other internships exist, such as those through local TV stations for broadcast meteorologists.

- William M. Lapenta NOAA Student Internship Program
- Department of Energy (DoE) <u>Science Undergraduate Laboratory Internships</u> (SULI)
- National Aeronautics and Space Administration (NASA) <u>Student Airborne Research</u> <u>Program</u> (SARP)
- NASA Internships Programs including Office of STEM Engagement (OSTEM)
  internships, NASA Pathways Program, Jet Propulsion Laboratory (JPL) internships, and
  NASA International Internship
- <u>NSF REU</u>: summer research opportunities for undergraduate students at various national and international institutions, including one at the National Weather Center
- NSF SOARS: summer research opportunity at the National Center for Atmospheric Research (NCAR) in Boulder, CO or other sponsoring laboratories
- NOAA Hollings Undergraduate Scholarship: two years of academic assistance and a summer internship at a NOAA facility
- NWS Pathways Program

## 12.3. Student Employment

Undergraduates can find student jobs in meteorology and related fields with the various entities in the NWC and on the OU campus, as well as with private sector companies on OU's Research Campus and throughout the Oklahoma City metro. The experience and broad range of skills developed by these opportunities make students more competitive when applying for employment after graduation. The <a href="Cooperative Institute for Severe and High-Impact Weather Research and Operations">Cooperative Institute for Severe and High-Impact Weather Research and Operations</a> (CIWRO), <a href="OCS">OCS</a>, <a href="Oklahoma Mesonet">Oklahoma Mesonet</a>, <a href="SPC">SPC</a>, and others have employed meteorology undergraduates. Some faculty also employ undergraduates within their research groups.

Students should watch for job announcements in departmental emails and the CAGS Monday Memo as well as on TV screens around the NWC. Students are also encouraged to use jobs.ou.edu.

## 12.4. Research and Academic Credit

Undergraduate students have multiple opportunities to participate in research with SoM faculty.

**Honors Students**: Students in OU's <u>Honors College</u> can conduct research under the supervision of a SoM faculty or adjunct faculty member. The end result of this research typically becomes the student's Honors thesis. To conduct Honors research and receive the appropriate academic credit (METR 3980), students must find a faculty member willing to supervise them and submit the <u>Honors Research form</u> to the Honors College. The Honors Research form must be signed by the faculty member serving as research supervisor, the student, and the SoM Honors Coordinator. This form serves as an agreement between the student and the faculty member that describes the expectations for the research and grading procedure.

Students who are employed in an undergraduate research position cannot be paid for their research work if they are using it for their Honors research in the semester that they are enrolled in METR 3980.

Meteorology majors can undertake Honors research outside of SoM; no permissions from SoM are required.

Other Honors College Research Opportunities:

- Honors Research Assistant Program (HRAP)
- First Year Research Experiences (FYRE)

Honors College Coordinator: Elinor Martin, elinor.martin@ou.edu

**Undergraduate Research Opportunities**: Students can receive funding for research opportunities via the <u>Undergraduate Research Opportunities Program</u> (UROP), typically with two deadlines per year in September and February. Other undergraduate research opportunities exist, such as through the <u>Office of Undergraduate Research and Creative Activity</u> (UReCA), which has various funding and presentation opportunities like the First Generation UReCA Fellowship that is encouraged for students who have not conducted research before, Summer UReCA Fellowships, and Undergraduate Research Day.

**Undergraduate Research for Credit in SoM**: Students conducting research with SoM faculty or adjunct/affiliate faculty members can receive academic credit by enrolling in the METR 4990 section associated with the faculty member. Prior to enrolling, and to receive enrollment permissions, both the student and the faculty member serving as their research supervisor must confirm participation with the undergraduate academic advisor via email. SoM encourages all faculty to pay students conducting undergraduate research.

#### 13. Careers

Meteorology blends mathematics, physics, and computer science to provide a theoretical and applied framework for understanding and predicting the complexities of the atmosphere. SoM's undergraduate program prepares students for the pursuit of a broad range of careers in areas such as operational forecasting, climatology, environmental science, remote sensing, engineering, emergency management, aviation and aerospace, energy, and related fields.

Our program prepares students for a broad range of careers which generally fall into one of three categories: public sector (government), private sector, and academia. Some examples of jobs in each of these categories are provided below.

- Public sector: Operational meteorologist at the NWS, military (e.g., Air Force) weather
  officer or forecaster, city or county emergency manager, government agricultural
  meteorologist, government air quality scientist, state climatologist, etc.
- **Private Sector**: Broadcast meteorologist at a TV station, meteorologist or climate scientist at energy and insurance/re-insurance companies, aviation meteorologist for passenger and cargo airlines, shipping or land transportation forecaster, instrument or technology developer, forensic meteorologist, etc.
- Academia: teacher, research scientist, faculty member, STEM librarian, etc.

The AMS has an excellent <u>Careers resource</u> where students can view career profiles of a wide variety of professionals, and it provides an array of additional resources. The American Geosciences Institute (AGI) also has created a <u>Career Compass for Atmospheric Sciences</u> that provides options, tips, suggestions, and strategies for how a student can obtain critical skills, experiences, and competencies to launch their career.

Although numbers vary year to year based on student interests and job availability, approximately 35–40% of our students go on to graduate schools in various disciplines, 25–45% to private sector positions, 10–15% to NWS, state, or other federal positions, 5–10% to TV broadcast meteorologist positions, and 2–5% to the military.

Students pursuing a degree in meteorology should make use of OU's excellent <u>Career Center</u>, which can be found on the 3<sup>rd</sup> floor of the Oklahoma Memorial Union. There also are career fairs put on by CAGS, AMS, NWA, and AGU. It is important that students prepare for career fairs and other opportunities adequately. OU has a number of resources to assist students; please contact SoM academic coordinators for more information.

Numerous resources exist for job search. In addition to those listed in <u>Section 12</u> for internships, the following websites may be useful:

- USAJobs all federal opportunities (e.g., NOAA, NWS)
- NASA Job Opportunities
- EPA Careers and Internships
- AMS Career Center job listings
- NWA Job Board (membership and login required)
- AGU job listings (membership and login required)
- European Meteorological Society list of employment pages
- LinkedIn
- Guide to Green Careers
- EcoJobs Green Environmental Jobs

Dayaway Careers Clean Energy Jobs

#### 14. Resources for Student Success

## 14.1. NWC Library

The <u>NWC Library</u> is located on the 4<sup>th</sup> floor of the NWC. There is space available for studying and meeting, including a reservable meeting room, computer workstations, and books and other materials selected to support your studies in meteorology and geography. The NWC Library is a branch of <u>OU Libraries</u>, so all OU Libraries materials are also available, including online journals, e-books, and even physical items that can be delivered to the NWC Library for you to pick up. Library staff are trained to help you locate resources, and the NWC Librarian is available for one-on-one or small group consultations if you have in-depth questions like "How do I choose a topic for my research paper?" or "What resources are available for learning about wildfires?" The NWC Library and OU Libraries have many more services and resources available to support your education and research (check out <u>their workshops</u>). Please reach out (nwclibrary@ou.edu) or visit!

The NWC Library serves as an OU ADRC testing location (Section 4.1).

## 14.2. Academic Support

The following resources are available for free to OU students.

- The <u>Math Center</u> offers walk-in and virtual tutoring for many 1000–3000 level OU Math courses as well as space to study math, for students who are enrolled in an appropriate Math course.
- The <u>Writing Center</u> is a University-wide program that enriches learning, teaching, and research through engagement with writing. Their consultants assist students and faculty across campus with all types of writing projects at any stage in the writing process.
- CHEM 1315 teaching assistants offer office hours in the Chemistry Help Lab, and students can get help from any teaching assistant in the Help Lab. See the Canvas course for your lab section of CHEM 1315 for details.
- The <u>Student Learning Center</u> is a division of the <u>Academic Success Center</u> that offers walk-in tutoring ("Action Tutoring") for over 100 OU courses. They also offer walk-in faculty-led study sessions ("Action Center") for some courses, individual and small group tutoring by appointment, study nights, and study skills consultations to help students take action towards their own academic success.
- The <u>Engineering Learning Center</u> offers peer-led tutoring for several Math, Physics, and Chemistry courses that meteorology students take.
- <u>University Libraries</u> provides services like textbook lending, study room reservation, database and journal access, workshops, consultations and office hours with librarians and library staff, tutorials, research guides, and much more.

## 14.3. Further Resources

Additional resources can be found in <u>Section 4</u>. Listed below are further OU resources that should be explored by students. This list should not be considered comprehensive.

- <u>Goddard Health Services</u> is OU's on-campus health clinic. Please refer to their website for information on scheduling appointments, clinic hours, and financial information.
- <u>University Counseling Center</u> (UCC) provides services to students, faculty, and staff.
   Counselors help people resolve existing challenges, prevent potential issues and crises,

- and develop new skills that will enhance their lives. A broad range of services in a variety of formats is offered. UCC is staffed by professional psychologists and counselors, as well as advanced graduate students under supervision.
- People who are lactating are welcome to utilize <u>lactation rooms on campus</u> for expressing breast milk or for nursing their child in a quiet, comfortable atmosphere. The rooms feature a pumping workstation, comfortable chair, and basic amenities (amenities vary by room). NWC 3654 is a <u>private office available in the NWC</u> that can be used for lactation purposes.
- <u>Veteran Student Services</u> assists veteran students with using VA benefits, searching for military scholarships, and finding veteran community on campus.
- <u>International Student Services</u> (ISS) provides information and support for all international students.

The AMS, NWA, and AGU provide additional resources, support, and opportunities for students.

# 15. NWC, CAGS, and SoM Administration

#### 15.1. National Weather Center

CAGS and SoM are housed in the <u>NWC</u> along with research and government facilities like CIWRO, OCS, South Central CASC, SPC, and NWS Norman Forecast Office.

Due to the collocation of academic and government facilities in the NWC, everyone entering the building is required to display an approved ID (OU Sooner Card/NOAA/Research Campus/NWC Security issued) while in public areas of the NWC. Only those with approved access are allowed entry between 7pm and 7am.

After your freshmen year, students in CAGS have NWC access 24 hours a day (one needs to swipe their ID card to get after 7pm). Freshmen will not have 24-hour access unless they become active in SoM student organizations (see <u>Section 9</u>).

### 15.2. College of Atmospheric and Geographic Sciences

The mission of <u>CAGS</u> is to offer innovative and multi-disciplinary education, research, and outreach programs in an environment that empowers students, faculty, and staff to seek equitable solutions to grand environmental and humanitarian challenges; to advance technology and propel knowledge that addresses our changing planet; and to develop engaged individuals for rewarding careers in the private sector, academia, government agencies, non-governmental organizations, and entrepreneurship.

The <u>College's staff website</u> provides contact information for the Dean's Office staff. The AGS Dean's Suite is full of valuable members of the college who can help students with issues such as Sooner card access, academic contracts, graduation checks, and more. They are located on the 3<sup>rd</sup> floor of the NWC in Suite 3630.

Certain documentation and procedures are handled through the Dean's Office: These include documentation that requires College-level advisor signature. Some examples of documentation and procedures handled by the College are (this list is not comprehensive):

- GI Bill and VA forms
- Second bachelor's degrees
- Flat-rate tuition exemptions
- Academic contracts
- Degree checks

### 15.3. School of Meteorology

The mission of <u>SoM</u> is to provide a world-class academic experience that promotes collaborative, innovative, and inclusive education and research opportunities in the atmospheric sciences with a positive impact on Oklahoma, the nation, and the world.

### 15.3.1. SoM Directors

 Dr. Cameron Homeyer (<u>chomeyer@ou.edu</u>) serves as the Director of the School of Meteorology.

- Dr. Elinor Martin (<u>elinor.martin@ou.edu</u>) serves as the Associate Director for Undergraduate Studies.
- Dr. Scott Salesky (<u>salesky@ou.edu</u>) serves as the Associate Director for Graduate Studies.

#### 15.3.2. SoM Staff

The SoM front office is located on the 5<sup>th</sup> floor of the NWC in Suite 5900. The staff in the front office are here to help students with issues that arise, whether that means aiding in-house or referring a student to the proper resource. See the <u>SoM staff website</u> for contact information.

Elizabeth Lund (<u>elund@ou.edu</u>) is the academic advisor and the main point of contact for students with questions related to the SoM undergraduate program. She is available to meet with students to work through academic, financial, personal, and other issues. Students may schedule an appointment with her via <u>iAdvise</u>.

## 15.3.3. SoM Undergraduate Studies Committee

Any revisions to the SoM undergraduate curriculum are handled by SoM's Undergraduate Studies Committee (UGSC). UGSC also oversees keeping this Undergraduate Handbook up-to-date and serves a point of contact for students who have concerns about or suggestions for future improvements to the SoM undergraduate curriculum and SoM policies for the undergraduate program as described in this document. UGSC consists of five voting members (faculty members and instructors) and three non-voting members:

## Voting Members (as of Fall 2025):

- Elinor Martin (Chair): Associate Professor, elinor.martin@ou.edu
- Naoko Sakaeda: Associate Professor, nsakaeda@ou.edu
- Stacey Hitchcock: Assistant Professor, stacey.hitchcock@ou.edu
- Greg McFarquhar: Professor; Director of CIWRO, mcfarq@ou.edu
- Amanda Kis: Lecturer, akkis@ou.edu

## Non-Voting Members:

- Elizabeth Lund: Academic Advisor, elund@ou.edu
- Shawn Riley: Computer Systems Coordinator, rileysp@ou.edu
- Student Member: SAC student representative

## Appendix 1: Acronyms and Abbreviations

- ADRC: OU Accessibility and Disability Resource Center
- AGI: American Geosciences Institute
- AGU: American Geophysical Union
- AMS: American Meteorological Society
- AP: Advanced Placement
- CAGS: OU College of Atmospheric and Geographic Sciences
- CART: OU Campus Area Rapid Transit
- CASC: Climate Adaptation Science Center
- CASH: OU Centralized Academic Scholarship Hub
- CIWRO: Cooperative Institute for Severe and High-Impact Weather Research and Operations
- CLEP: College Level Examination Program
- C S: OU Computer Science course code abbreviation
- DGES: OU Department of Geography and Environmental Sustainability
- FAFSA: Free Application for Federal Student Aid
- GIS: Geographic information systems
- GMAT: Graduate Management Admission Test
- GRE: Graduate Record Examination
- HOOT: Hub of OWL Operational Technology
- IB: International Baccalaureate
- IT: Information technology
- MATH: OU Mathematics course code abbreviation
- MBA: Master of Business Administration
- METR: OU Meteorology course code abbreviation
- NASA: National Aeronautics and Space Administration
- NOAA: National Ocean and Atmospheric Administration
- NSF: National Science Foundation
- NWA: National Weather Assocation
- NWC: National Weather Center
- NWS: National Weather Service
- OCS: Oklahoma Climatological Survey
- OU: University of Oklahoma
- OUPD: OU Police Department
- OWL: OU SoM Oklahoma Weather Lab
- REU: Research Experiences for Undergraduates Program
- SAC: OU SoM Student Affairs Committee
- SFC: OU Student Financial Center
- SoA: OU School of Aviation
- SOARS: Significant Opportunities in Atmospheric Research and Science
- SoM: OU School of Meteorology
- SoMO: OU SoM Outreach
- SPC: Storm Prediction Center
- STEM: Science, technology, engineering, and mathematics
- TA: Teaching assistant

• UGSC: OU SoM Undergraduate Studies Committee