

Atmospheric Sciences Graduate Student Guide

Department of Atmospheric Sciences
College of Mines and Earth Sciences
University of Utah

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This document is intended to be complementary, but subordinate, to the policies of
The Graduate School of the University of Utah.



Photo by Kimi Smith

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I. The Department

The Department of Atmospheric Sciences at the University of Utah is the leading program of weather and climate-related research and education in the Intermountain West and is recognized internationally for its expertise in cloud-aerosol-climate interactions, mountain weather and climate, climate physics and dynamics, weather and climate modeling, land-atmosphere interactions, air quality, and tropical meteorology. Our research and teaching endeavors provide the knowledge and tools needed to address the challenges posed by hazardous weather and climate change in the 21st century. Our faculty and students also collaborate extensively with departments and colleges throughout the University, including interdisciplinary programs examining global change and sustainability. Our strengths include student-centered faculty, internationally prominent scholars, a small student-to-faculty ratio, and programs that guide students from classroom to careers.

The Department offers graduate courses and research opportunities leading to M.S. and Ph.D. degrees. Class sizes are small and offer easy and frequent interaction with the faculty. The graduate program has been carefully designed to provide students with a solid foundation in a broad spectrum of the atmospheric sciences while allowing students to specialize for their thesis or dissertation research. Through these goals, the Department expects our graduates to contribute during their professional careers to a diverse range of issues that affect the public locally, nationally, and internationally. Nearly all of our graduate students are supported by graduate research assistantships.

For more information about the research interests of our faculty please visit our research programs web page at <http://www.atmos.utah.edu/research/index.php>.

II. Admissions

Requirements for Admission:

To be considered for admission to the M.S. program, applicants must meet the following minimum requirements:

1. A bachelor's degree from a regionally accredited U.S. college or university, or recognized equivalent from a similarly accredited international college or university;
2. Successful completion of courses in math (through ordinary differential equations), calculus-based physics, general chemistry, and computer science comparable to those required for an [Atmospheric Sciences B.S.](#);
3. A cumulative GPA of at least 3.0 on a 4.0 scale.
4. Provide the results of the Graduate Record Examinations (GRE) revised General Test or GRE General Exam (if taken before August 1, 2011). Scores must be less than five years old; and
5. Demonstrate English-language proficiency by meeting [minimum TOEFL or IELTS scores](#) and provide results to the University (for international student applicants, who do not qualify for a [waiver](#)). Scores must be less than two years old.

To be considered for admission to the Ph.D. program, applicants must meet all of the M.S. admission requirements and have completed a thesis-based M.S. degree in atmospheric sciences or meteorology from a regionally accredited U.S. college or university, or recognized equivalent from a similarly accredited international college or university. In addition, such students must either have the Comprehensive Exam requirement waived by the Committee on Doctoral Advancement (CODA) or complete the core classes, pass the Comprehensive Exam at the M.S. level or higher, and be recommended by a majority vote of the faculty for continuation in the Ph.D. program.

Application Process:

The Department only accepts new graduate students for the fall semester. In order to meet this deadline, the Department accepts applications from October 1 through January 7 for admission to the program the following fall semester. Late applications may be accepted, but graduate research assistantships may no longer be available. The selection process is very competitive, and not all qualified applicants can be admitted.

Prospective graduate students must apply for admission to graduate study through the ApplyYourself online program administered by the Office of Admissions (<https://app.applyyourself.com/?id=utahgrad>). The ApplyYourself online program allows applicants to upload the required materials, solicit reference letters, and track the progress of their applications. A complete summary of the application procedures for the Department of Atmospheric Sciences is available at <http://www.atmos.utah.edu/graduate/apply.php>.

After reviewing each application, the Department will make its recommendation to the Office of Admissions. The Department Chair will then contact applicants recommended for admission by email to inform them of our decision and provide the offer details. A formal letter of admission to The Graduate School will be sent by mail if the Office of Admissions accepts the recommendations of the Department. The Department would appreciate a reply either accepting or declining our offer as soon as possible. However, the University of Utah abides by the Council of Graduate Schools Resolution Regarding Graduate Scholars, Fellows, Trainees and Assistants (http://www.cgsnet.org/portals/0/pdf/CGS_Resolution.pdf), which does not require prospective students to respond to offers of financial support prior to April 15.

An offer of acceptance is valid only for the semester the applicant is admitted. If an applicant does not enroll during his/her admitted term, the applicant must resubmit an admissions application and fee before the application deadline for the semester he/she wishes to begin.

Students should be aware that the Department makes a recommendation for admission to the University. The Office of Admissions makes the final decision on admission. Please reference the requirements outlined by the Office of Admissions available at <http://admissions.utah.edu/apply/graduate/>.

Readmission:

If an applicant chooses not to attend after being extended an offer of admission or if an applicant wishes to reapply for a subsequent semester, he/she must restart the admission process from the beginning.

III. Registration

Continuous Registration Requirement:

All graduate students must be registered for at least one course (each fall and spring semester) from the time of formal admission through completion of all requirements for the degree they are seeking, unless granted an official Leave of Absence. For the purposes of this continuous registration requirement, The Graduate School accepts any graduate level course (5000-6000 level for masters; 6000-7000 level for doctoral) that awards one or more credits. However, in order to be considered a full-time student, graduate students must be registered for 9 credit hours of coursework or 3 credit hours of thesis research. A student defending his/her thesis must register for at least one course during the semester in which they defend (i.e., fall, spring, or summer). Students employed by the University should register for a minimum of 3 credits of ATMOS 6970 (Thesis Research: Master's) or ATMOS 7970 (Thesis Research: Ph.D.) to avoid FICA taxes being withheld from their earnings. Domestic students who are no longer employed by the University can choose to register for one credit of thesis research. International students must always be registered for at least 3 credit hours to maintain their student visa status. If a student does not comply with this continuous registration requirement and does not obtain an official Leave of Absence, they will be automatically discontinued from the graduate program. In this case, the student will be required to reapply for admission to the University through Graduate Admissions upon approval of the home department.

Fall & Spring Semester Registration:

Students eligible for the Tuition Benefit Program (TBP) (see Section X for details) should register for 11 credit hours during both the fall and spring semesters. If the number of credit hours from coursework is less than 11, students should register for thesis research (i.e., ATMOS 6970 or ATMOS 7970) to make up the difference. If a student's tuition is being funded by a source other than the TBP and coursework is required by their Program of Study, students should register for 9 credit hours to maintain full-time status. Students who are employed by the University but are not eligible for the TBP should register for 3 credit hours of thesis research during both the fall and spring semesters to avoid FICA taxes being withheld from their earnings. Domestic students who are not employed by the University may register for one credit hour of thesis research. International students must always be registered for at least 3 credit hours to maintain their student visa status.

Summer Semester Registration:

Students who were eligible for the TBP during the fall and/or spring semesters should register for 3 credit hours of thesis research during the summer semester. Students who plan to register for the summer semester should discuss this with the Department Office during April to make sure they qualify for the summer tuition waiver. It is in the best interest of the Department for eligible students to enroll for summer credit hours because a portion of the tuition is returned to the Department.

Resident and nonresident students not receiving tuition waivers, who wish to register for summer semester courses are encouraged to do so only if credit hours are required for their Program of Study. If credit hours are needed, students are encouraged to register for 3 credits of thesis

research because they are always billed at the resident rate. Students are advised that summer credit hours count toward the 84 hour rule (see Section X for details).

Leave of Absence:

Officially admitted, domestic graduate students who have registered for, and completed, at least one semester of their designated program may apply for a University Leave of Absence to postpone their studies for up to one year. Students who wish to discontinue their studies for one or more semesters (other than summer term) must complete a [Graduate Student Request for Leave of Absence](#) form. The form must be approved and signed by the Supervisory Committee Chair and Department Chair and then forwarded to the Dean of The Graduate School for approval.

Requests for a Leave of Absence may be granted for up to one year for circumstances related to:

- a serious health condition of the student or family member,
- parental leave to care for a newborn or newly adopted child,
- a call to serve in military service, or
- other compelling reasons that the student's department believes is in the best interests of both the student and the University.

For a complete list of details and requirements for a Leave of Absence please refer to <http://gradschool.utah.edu/graduate-catalog/registration/>.

The form requesting a Leave of Absence for a current semester must be completed and received in The Office of the Registrar by the last day of classes of that semester. Students must officially withdraw from classes in any semester for which a Leave of Absence is granted; failure to formally withdraw results in the reporting of E or EU grades for all classes. For more information about official withdrawal, see [Grading Policies](#) in the University catalog. The period during which a Leave of Absence is granted does not count toward the period allowed to complete the degree. Leaves are granted for a maximum of one year at a time, and may be renewed by submitting a new form to The Office of the Registrar. The Leave of Absence is void if a student registers for classes in a semester for which a leave was granted. Although a Leave of Absence preserves their status in the graduate program, students are advised that it does not necessarily preserve their graduate research assistantship.

International students on a F1 or J1 visa must obtain permission from International Student & Scholar Services prior to submitting a Leave of Absence application. Vacation semesters for international students will only be approved for one semester. Medically necessary reduced course loads are approved for one semester at a time, and may be extended through International Student & Scholar Services for an additional semester to a maximum of three (3) semesters (i.e., one academic year). Failure to register for a fall or spring semester or to receive approval for a vacation semester will result in an international student being automatically discontinued from the graduate program with the subsequent loss of his/her visa status. In this case, the student will be required to reapply for admission to the University through Graduate Admissions upon approval of the home department.

Graduate students, eligible for a Leave of Absence as described above, who desire a leave that is shorter than one semester, may apply for a Departmental Leave of Absence of up to 8 weeks. The Departmental Leave of Absence form may be obtained from the Departmental Office. It must be signed by the student, the Supervisory Committee Chair, and the Department Chair and will only be approved for circumstances outlined above. Students on a Departmental Leave of Absence must maintain registration as described in the Continuous Registration Requirement section above to avoid potential loss of their student status and associated tuition and health insurance benefits. In some circumstances, it may be necessary for students on a Departmental Leave of Absence to be placed on a short work break resulting in unpaid leave. Students are advised to consult with the Department Office before deciding on the length of the short work break because students must earn a minimum threshold salary during the semester to maintain eligibility for the TBP. Failure to maintain TBP eligibility would result in a student being required to pay for their own tuition and health insurance. Students taking a Departmental Leave of Absence during a semester will be provided reasonable accommodations with regards to missed coursework within the Department. Ph.D. students taking a Departmental Leave of Absence will be allowed to delay the Doctoral Qualifying Examination by one semester.

IV. Academic Requirements for the M.S.: Thesis Option

Supervisory Committee:

Unless otherwise approved by the Department Chair, a Supervisory Committee must be appointed during the first semester of the student's residency. Master's supervisory committees consist of three members, the majority of whom must be tenure-line faculty in the student's major department. All University of Utah faculty members including tenure-line, career-line, adjunct, visiting and emeritus are eligible to serve as Supervisory Committee members. The members must hold an academic or professional doctorate, the terminal degree in the relevant field, and/or must have demonstrated competence to do research and scholarly or artistic work in the student's general field. Persons not affiliated with the University of Utah may also serve as committee members upon approval of the Dean of The Graduate School (a vita for the proposed committee member must accompany each request). Committee chairs must be selected from tenure-line faculty. Immediate family members are not eligible to serve on a student's Supervisory Committee.

Exceptions to these guidelines must be recommended and justified by the Department Chair and approved by the Dean of The Graduate School. The two most common exceptions include a career-line faculty member serving as a Supervisory Committee Chair and two career-line faculty members serving on a Supervisory Committee chaired by a tenure-line faculty member.

Selection of the Supervisory Committee members should be made in consultation with the student's faculty advisor. The Supervisory Committee form may be obtained from the Department Office. Once the Department Office has received the signed Supervisory Committee form and it has been approved by the Department Chair, an Electronic Graduate Record File will be generated and forwarded to The Graduate School for approval. Selection of the Supervisory Committee membership is very important as the committee is responsible for approving the Program of Study, evaluating the research prospectus, and judging the M.S. thesis and defense.

Each student must meet with their Supervisory Committee during the fall semester of their first academic year to get their Program of Study approved. Students are then required to meet with their Supervisory Committee at least once per academic year until completion of the program to review research progress and update their Program of Study. An effort should be made to hold one of these required meetings approximately 6 months prior to the thesis defense.

Program of Study:

Students are expected to work with their Supervisory Committee to develop a detailed Program of Study that provides the student with the necessary theoretical framework for their specific research topic. Program of Study forms are available from the Departmental Office. A signed Program of Study form must be submitted to the Department Office prior to the end of the first semester of graduate study. The Program of Study must meet the University requirements for the M.S. degree including:

1. A minimum of 30 credit hours of graduate courses (i.e., numbered 5000 or above) and a thesis, or in rare instances, a non-thesis option;
2. A minimum of 20 credit hours must be in coursework other than ATMOS 6970: Thesis Research or ATMOS 6980: Faculty Consultation;
3. A minimum of 6 credit hours must be Thesis Research (ATMOS 6970); and
4. An overall GPA of 3.0 or higher. A grade below C- is not accepted toward a graduate degree.

The student is also required to complete one credit of ATMOS 7810 (Graduate Seminar) in both the fall and spring semesters of the first year. Although the Program of Study may be periodically revised, care should be taken by the Supervisory Committee to ensure that the required courses will be available on a timeframe that will not unduly delay graduation.

Comprehensive Examination:

All M.S. students are evaluated during their first year for knowledge in the atmospheric sciences and their intended field of research through the core classes (ATMOS 6010: Fundamentals of Dynamic Meteorology, ATMOS 6020 Fundamentals of Physical Meteorology, ATMOS 6030: Climate Dynamics) and the preparation of a Research Prospectus, consisting of both written and oral components. Collectively, this evaluation is known as the Comprehensive Examination even though it is based on a combination of coursework and research activities during the first year. The written component of the Research Prospectus, which will be evaluated by the Supervisory Committee, is due on the last day of classes during the spring semester of the first year in the graduate program. The oral component of the Research Prospectus, which will be evaluated by all Atmospheric Sciences faculty in attendance, must be completed at least two days prior to the grade submission deadline for the spring semester of the first year in the graduate program.

The written component of the Research Prospectus is typically a document of 3000 words or less (not including figure captions and references) prepared in consultation with the faculty advisor consisting of:

1. A working title for the research project;

2. A review of literature and existing knowledge in the area of intended study that contextualizes background information and identifies a key paradox, inconsistency, or gaps in understanding to be addressed by the research project;
3. A statement of the research goal or goals (may include a summary of key hypotheses or questions to be tested or examined);
4. A description of the project components and organization; and
5. A summary of preliminary research, which may consist of any combination of (a) data analysis, (b) simulation results, and (c) observational analysis.

The oral component of the Research Prospectus is a summary of the written prospectus followed by a question and answer session. The entire oral presentation (including questions and answers) must be less than 30 minutes with no more than 20 minutes devoted to the student summary. The oral presentation will be made to the faculty of the Department of Atmospheric Sciences and will be closed to the public.

The written and oral components of the Research Prospectus will be evaluated separately based on the following scale:

Grade	Criterion
A	Meets expectations at M.S. and Ph.D. levels
B	Meets expectations at M.S. level
C	Marginally passable at M.S. level, unacceptable at Ph.D. level
D	Unacceptable for graduate work in the Department of Atmospheric Sciences

At the end of the spring semester of the first year of graduate study, the performance on the Comprehensive Exam will be reviewed by the faculty of the Department of Atmospheric Sciences and each student will be placed in one of the following categories by majority decision:

- **Pass with Distinction:** The student may enter the Ph.D. program directly without completion of a M.S. thesis, but has the option to complete a M.S. degree if desired.
- **Pass:** The student is encouraged to complete the requirements for the M.S. degree. Following a successful M.S. defense, the student may submit a petition to the Committee on Doctoral Advancement (CODA) for consideration of continuation toward the Ph.D. (see Section VI for details).
- **Failure:** The student will be immediately dismissed from the graduate program unless: (1) the student's Supervisory Committee recommends that the student be allowed to continue work toward a degree, *and* (2) the student successfully completes all remedial activities dictated by the majority vote of the faculty prior to the commencement of the fall semester (for M.S. students) or prior to the end of the spring semester of the following year (for Ph.D. students). Failure to satisfactorily complete the prescribed remedial activities in the allotted time frame will result in immediate dismissal from the graduate program.

We expect only a small percentage of M.S. students to Pass with Distinction. Typically these receive an A or A- in each core class, an A for both components of the Research Prospectus, and

express a clear capability to conduct independent research during their first year. Most M.S. students will receive a Pass. Although rare, cases of poor performance for either M.S. or Ph.D. students can result in Failure.

Thesis Defense:

Students are required to complete and orally defend a M.S. thesis, except in rare, non-thesis option cases (see Section V for details). In preparation for defense, a complete draft of the thesis must be submitted to the Supervisory Committee Chair at least three weeks prior to the defense, and to the remainder of the committee no later than two weeks prior (see also: www.regulations.utah.edu/academics/6-201.html). The draft must abide by standard publication practices in terms of content, language, and style. The final thesis format must also adhere to University guidelines published by the University Thesis Office (www.gradschool.utah.edu/thesis/index.php). University guidelines permit the use of an alternative thesis/dissertation format comprised of chapters that are authored or co-authored by the student and are either published or suitable for publication in a peer-reviewed journal (see Section VIII for details). A student may wish to submit all, or a portion, of his/her thesis to the [University Writing Center](#) for assistance. In addition, a student may also submit a copy of his/her thesis to the [Thesis Office](#) prior to the defense to check for potential formatting problems.

An oral defense must be scheduled with the Department Office. Students should reference the Thesis Office deadlines to submit a defended manuscript when scheduling a defense date. After the oral presentation, which is open to the public, a question and answer period must be allowed involving questions from the committee and public. At the conclusion of the public participation, the committee will excuse the public and conduct further questioning on the thesis and related topics. The outcome of the thesis defense is reported on the Supervisory Committee Approval form. A majority of the committee must sign and approve this form. Once a student has successfully defended their thesis and obtained the signature of the Department Chair, they can submit it to the Thesis Office for final editing and approval. Students should refer to the “[Handbook for Thesis and Dissertations](#)” for instructions and details on acceptable formatting. No degree will be conferred until the Thesis Office issues a thesis release.

Student Access to Academic Information:

Once The Graduate School has approved the Supervisory Committee, the student can view their Electronic Graduate Record File online. Students can access their graduate student record by logging into Campus Information Services (cis.utah.edu) and clicking on Graduate Student Summary under the Graduate Student section.

Time Constraints:

A detailed [M.S. Thesis Completion Calendar](#) is available to students. This calendar contains a timeline of all the events that must take place for students to graduate with a M.S. degree. All work for the M.S. degree must be completed within four consecutive calendar years. On recommendation of the student’s Supervisory Committee, The Graduate School can modify or waive this requirement in meritorious cases.

V. Academic Requirements for the M.S.: Non-Thesis Option

In rare instances, a student may be allowed to pursue a non-thesis M.S. option. This requires completion of a Program of Study that is approved by the M.S. Supervisory Committee and Department Chair. A project or exam will be given as advised by the Supervisory Committee. This exam date must be entered into the Electronic Graduate Record File by the Department Office and approved by the Supervisory Committee Chair no later than the last day of the semester in which the student expects to graduate.

VI. Committee on Doctoral Advancement (CODA)

The goal of the CODA is to provide an independent assessment of the potential for a student to obtain a Ph.D. degree. The CODA consists of three members appointed by the Department Chair for each CODA application. All CODA members must be tenure-line faculty members in the Department of Atmospheric Sciences. In addition, no CODA member can be a member of the student's M.S. committee or the Department Chair.

M.S. students who have received a “Pass” on the Comprehensive Exam and wish to continue in the Ph.D. program may initiate the CODA process after full acceptance of the M.S. thesis by the M.S. committee (i.e., after the “Supervisory Committee Approval Form” has been signed). For consideration, the following materials must be submitted to the Department in electronic form:

1. M.S. thesis;
2. Curriculum vitae;
3. Copies of any papers or conference preprints the student has authored or coauthored;
4. A cover letter indicating the student's desire to be considered for acceptance into the Ph.D. program. This letter should summarize the student's motivation and credentials.

Upon submission of a CODA application, letters of recommendation will be solicited from the M.S. Supervisory Committee members. The CODA then has 30 days to reach a majority decision to determine if a M.S. student is eligible for continuation in the Ph.D. program. In cases when a student CODA petition is not successful, the CODA Chair will provide a written summary of the decision rationale to the Department Chair. At the conclusion of the CODA process, the Department Chair will communicate the results to the student and his/her faculty advisor.

Students entering the program with a thesis-based M.S. in atmospheric sciences or meteorology from another regionally accredited U.S. college or university, or recognized equivalent from a similarly accredited international college or university, may be nominated by a faculty member to be evaluated by CODA for the waiver of the Comprehensive Exam requirement. Such a waiver will be granted only for students with an exceptional background in atmospheric sciences beyond the M.S. degree. The CODA evaluation in this instance involves a process similar to above except that the nomination must be initiated at least 120 days prior to the start of the Fall semester, all materials must be provided to the Department at least 90 days prior to the start of the Fall semester, and the CODA decision must be made 30 days before the start of the Fall semester.

All CODA decisions are final and cannot be appealed unless a procedural error was made that adversely impacted the student's credentials that were evaluated by CODA. Students may reapply to the CODA one time if they have significant additional scholarly credentials (i.e., publications) to present.

VII. Academic Requirements for the Ph.D.

Supervisory Committee:

Unless otherwise approved by the Department Chair, a Supervisory Committee must be appointed during the first semester of the student's residency. Doctoral supervisory committees consist of five members, the majority of whom must be tenure-line faculty in the student's major department. One member of the supervisory committee must be from outside the department. All University of Utah faculty members including tenure-line, career-line, adjunct, visiting and emeritus are eligible to serve as Supervisory Committee members. The members must hold an academic or professional doctorate, the terminal degree in the relevant field, and/or must have demonstrated competence to do research and scholarly or artistic work in the student's general field. Persons not from the University of Utah may also serve as committee members upon approval of the Dean of The Graduate School (a vita for the proposed committee members must accompany the request). Committee chairs must be selected from tenure-line faculty. Immediate family members are not eligible to serve on a student's Supervisory Committee.

Exceptions to these guidelines must be recommended and justified by the Department Chair and approved by the Dean of The Graduate School. The two most common exceptions include a career-line faculty member serving as a Supervisory Committee Chair and two career-line faculty members serving on a Supervisory Committee chaired by a tenure-line faculty member.

Selection of the Supervisory Committee members should be made in consultation with the student's faculty advisor. The Supervisory Committee form may be obtained from the Department Office. Once the Department Office has received the signed Supervisory Committee form and it has been approved by the Department Chair, an Electronic Graduate Record File will be generated and forwarded to The Graduate School for approval. Selection of the Supervisory Committee membership is very important as the committee is responsible for approving the Program of Study, evaluating the research prospectus, and judging the Ph.D. dissertation and defense.

Each student must establish and meet with a Supervisory Committee during the first semester of their Ph.D. program to complete a proposed Program of Study. Typically, this involves the selection of elective courses needed for disciplinary breadth and research specialization and the development of a timetable for initial research and completion of the Doctoral Qualifying Examination. Students are then required to meet with their Supervisory Committee at least once per academic year until completion of the program to review research progress and update their Program of Study. Supervisory committee meetings for the Doctoral Qualifying Exam and Ph.D. dissertation defense meet this requirement in the years they are completed.

Program of Study:

Students are expected to work with their Supervisory Committee to develop a detailed Program of Study that provides the student with the necessary theoretical framework for their specific research topic. Program of Study forms are available from the Departmental Office. A signed Program of Study form must be submitted to the Department Office prior to the end of the first semester of graduate study. The Program of Study must meet the University requirements for the Ph.D. including:

1. A minimum of three full years (six semesters) of approved graduate work (i.e., courses numbered 5000 or above). Course work completed as part of an approved M.S. Program of Study may not be used to fulfill the University requirements for the Ph.D.;
2. A minimum of 14 semester credit hours of Thesis Research (ATMOS 7970);
3. At least one year (two consecutive semesters) of the Ph.D. program must be spent in full-time academic work (i.e., at least 9 semester credit hours if taking courses or 3 semester credit hours if only taking Thesis Research) at the University of Utah to fulfill the full-time registration requirement; and
4. An overall GPA of 3.0 or higher. A grade below C- is not accepted toward a graduate degree.

Although the Program of Study may be periodically revised, care should be taken by the Supervisory Committee to ensure that the required courses will be available on a timeframe that will not unduly delay graduation.

Comprehensive Examination and CODA:

All Ph.D. students must either: (1) pass the Comprehensive Exam with distinction; (2) pass the Comprehensive Exam and be approved for continuation toward the Ph.D. by the CODA; (3) obtain an M.S. degree from another regionally accredited program and be approved for continuation toward the Ph.D. after passing the Comprehensive Exam at the M.S. level and gaining the recommendation of the faculty; or (4) obtain a thesis-based M.S. degree from another regionally accredited program and have the Comprehensive Exam requirement waived by the CODA. Option (4) is recommended only for students with an exceptional background in atmospheric sciences beyond the M.S. degree and requires nomination by a faculty member and CODA evaluation prior to the start of the program.

Doctoral Qualifying Examination:

No later than two years after admission to the Ph.D. program, students must pass a Doctoral Qualifying Examination that is designed to test the student's specific knowledge and ability in the focused area of their Ph.D. research. In general, the student will prepare a written dissertation research proposal that will be delivered to the Ph.D. Supervisory Committee for review a minimum of 14 calendar days before the exam date (by unanimous consent, the committee may elect to reduce this time period). During the exam, a 30-45 minute oral presentation will be given by the student to the Supervisory Committee members. This presentation will be followed by a question-and-answer period. In some cases, a supplemental written component of the Doctoral Qualifying Examination may also be administered. This is at the discretion of the

Supervisory Committee members. This written component should be administered after the student has submitted the written formal proposal and before the oral portion of the Doctoral Qualifying Exam. Results of the supplemental written exam, if administered, will be available for review by all the committee members. The outcome of the Doctoral Qualifying Examination is gauged by the majority vote of the Supervisory Committee members. In the event that a student does not pass the Doctoral Qualifying Examination, a written summary of the rationale for the majority decision must be provided to the Departmental Chair within 14 days of the decision. Failure to successfully complete a Doctoral Qualifying Examination within the specified time-frame may result in dismissal from the Ph.D. program.

Dissertation Defense:

Students are also required to complete and orally defend a Ph.D. dissertation. The dissertation must provide evidence of originality, an ability to do independent investigation, and it must contribute new knowledge. The dissertation must also show a mastery of the relevant literature and be presented in an acceptable style. After the oral presentation, which is open to the public, a question-and-answer period must be allowed involving questions from the committee and the public. At the conclusion of the public participation, the Supervisory Committee will excuse the public and conduct further questioning on the dissertation and related topics. Successful defense of the Ph.D. dissertation is obtained when a majority of the Supervisory Committee members sign the “Supervisory Committee Approval” form. Once a student has successfully defended their dissertation and obtained the signature of the Department Chair, they can submit it to the Thesis Office for final editing and approval. Students should refer to the “[Handbook for Thesis and Dissertations](#)” for instructions and details on acceptable formatting. No degree will be conferred until the Thesis Office issues a thesis release.

A draft of the Ph.D. dissertation must be submitted to the Supervisory Committee Chair at least three weeks prior to the defense, and to the remainder of the committee no later than two weeks prior (www.regulations.utah.edu/academics/6-203.html). The draft must abide by standard publication practices in terms of content, language, and style. The final dissertation must adhere to University guidelines published by the University Thesis Office (www.gradschool.utah.edu/thesis/index.php). University guidelines permit the use of an alternative thesis/dissertation format comprised of chapters that are authored or co-authored by the student and are either published or suitable for publication in a peer-reviewed journal (see Section VIII for details). A student may wish to submit all, or a portion, of his/her dissertation to the [University Writing Center](#) for assistance. In addition, a student may also submit a copy of his/her dissertation to the [Thesis Office](#) prior to the defense to check for potential formatting problems.

Student Access to Academic Information:

Once the Graduate School has approved the Supervisory Committee, the student can view their Electronic Graduate Record File online. Students can access their graduate student record by logging into Campus Information Services (cis.utah.edu) and clicking on Graduate Student Summary under the Graduate Student section.

Time Constraints:

A detailed [Ph.D. Thesis Completion Calendar](#) is available to students. This calendar contains a timeline of all the events that must take place for students to graduate with a Ph.D. degree. All work for the Ph.D. degree must be completed within seven consecutive calendar years from the date of matriculation into the program regardless of whether students enter with a bachelor's or master's degree. On recommendation of the student's Supervisory Committee, The Graduate School can modify or waive this requirement in meritorious cases. However, students whose studies have been interrupted for long periods and who have been granted an extension to complete their degrees may be required to complete additional courses, pass examinations, or otherwise demonstrate that they are current in their field.

VIII. Alternative Format Thesis/Dissertation

The traditional thesis/dissertation is a long monograph that does not typically lend itself to direct publication in the atmospheric sciences literature. In practice, most students publish papers while working toward their degree and desire to publish additional research shortly after defending their thesis/dissertation. For this reason, students may choose to prepare an alternative format thesis/dissertation comprised of chapters that are authored or co-authored by the student and are either published or suitable for publication in a peer-reviewed journal.

Such a thesis/dissertation must still meet University requirements and could be organized as follows:

1. A general abstract that covers all components;
2. An acknowledgements section that recognizes funding sources and includes any required disclaimers;
3. A general introduction that contextualizes existing knowledge in the field, highlights the scientific and in some instances historical or societal significance of the research, and clearly defines the meaningful problem or problems addressed by the doctoral work;
4. Chapters that are individually formatted like a research article (e.g., abstract, intro, data and methods, results, conclusions, references) and contain either previously published material or material intended for future publication and potentially co-authored with other scientists;
5. A conclusion that integrates the most significant findings of the thesis/dissertation research and presents recommendations for future work; and
6. An optional appendix summarizing additional professional accomplishments of the student including publications not included in the dissertation, field program experience, etc.

Chapters containing previously published material must acknowledge co-authorships and collaborations and, if the copyright has been transferred (e.g., articles published in American Meteorological Society, American Geophysical Union, or Royal Meteorological Society journals), permission to duplicate copyrighted material with the required copyright statement. Students are also required to obtain releases from any coauthors (see <http://gradschool.utah.edu/thesis/forms/>).

The number of papers that should be included in each thesis/dissertation varies depending on the discipline, quality, and originality of the research, as judged by the Supervisory Committee. In addition, the entire thesis/dissertation, including previously published peer-reviewed work, is subject to review by the Supervisory Committee. Areas where the student must correct mistakes or address committee concerns in previously published peer-reviewed work must be carefully referenced to avoid plagiarism.

IX. Criteria for Dismissal from the Program

M.S. students may be dismissed from the program for failure to achieve any of the following:

- Maintain a minimum GPA of 3.0;
- Earn a passing grade or better on the Comprehensive Exam;
- Officially register documentation of a Supervisory Committee and Supervisory Committee Chair by the end of the second semester as a M.S. student;
- Continuously maintain an official advisor and Supervisory Committee through completion of the program; and
- Make acceptable progress toward the degree as determined by the Supervisory Committee.

Doctoral students may be dismissed from the program for failure to achieve any of the following:

- Maintain a minimum GPA of 3.0;
- Officially register documentation of a Supervisory Committee and doctoral advisor by the end of their second semester as a doctoral student;
- Continuously maintain an official advisor and Supervisory Committee through completion of the program;
- Pass the Doctoral Qualifying Exam by the end of their second year in the doctoral program; and
- Make acceptable progress toward the degree as determined by the Supervisory Committee.

In addition, any student engaging in academic, behavioral, or professional misconduct as defined in the [Student Code](#) may be immediately dismissed from the graduate program. Students should be aware that the [Student Code](#) also specifically enumerates student rights and responsibilities.

X. Financial Assistance

A graduate research assistantship (GRA) is normally offered to students who are admitted to the program. The GRA typically includes a tuition waiver, subsidized student health insurance benefit plan (<https://gradschool.utah.edu/tbp/index.php>), and financial compensation that is competitive with other Atmospheric Sciences graduate programs. Continuing financial support is conditional on satisfactory student performance and availability of funds.

Tuition & Health Insurance Benefits:

Most graduate students are eligible to receive a tuition waiver and subsidized health insurance from the University (see <http://gradschool.utah.edu/tbp/tuition-benefit-program-guidelines/> and check with Department Office). Time limits for the TBP are as follows:

1. Students in a Master's program are limited to two years (4 semesters) of TBP support;
2. Students in a doctoral program who entered with a Bachelor's degree are limited to five years (10 semesters) of TBP support;
3. Students in a doctoral program who also received a Master's degree at the University of Utah are limited to five years of TBP support (2 years for a Master's + 3 additional years for a doctorate); and
4. Students entering a doctoral program with a Master's degree from another university are eligible for four years (8 semesters) of TBP support.

Once the TBP eligibility has been exhausted, the student will be responsible for paying tuition and health insurance on his/her own, unless an alternative arrangement can be negotiated with his/her faculty advisor. Any alternative arrangements (e.g., a monthly pay increase to compensate for the extra costs of tuition and health insurance) are at the discretion of the faculty advisor and should be discussed by February of the second year for M.S. students and the third year for Ph.D. students. It is important for students to set any monthly pay increases aside in order to pay for health insurance (due in August) and tuition and fees (due in September/January). Students who wish to continue voluntary health insurance after their TBP eligibility has been exhausted can explore their options at <http://gradschool.utah.edu/tbp/insurance-information/> and <http://www.uhcsr.com/utah>.

Residency Status:

Domestic (out of state) students must apply for residency after they have accumulated at least 40, but less than 85 enrolled student credit hours (<http://gradschool.utah.edu/tbp/tuition-benefit-program-guidelines/>). Students are advised that they must take steps to establish intent to become a resident of Utah and submit an application for resident reclassification by the term deadline to the Admissions Office. A complete set of guidelines for residency reclassification can be found at <http://admissions.utah.edu/apply/residency/>. Specific steps that must be taken to be reclassified as a resident include obtaining a Utah driver's license, Utah voter registration, and Utah car registration if operating a vehicle in Utah. In addition, these ties must be established at least three (3) months (90 days) prior to the first day of class for the academic term for which resident student status is requested (see [Board of Regents Policy R512, Creating Utah Domicile](#), for more detail). Domestic students who do not obtain residency status with the University of Utah before they reach 85 cumulative enrolled credit hours will be billed for tuition at the non-resident rate if registered for credit hours other than Thesis Research hours.

Travel Assistance:

In addition to the research funds from a student's faculty advisor, there are several other funding opportunities available to support a student's travel to attend scientific conferences to present research.

1. The Graduate School provides partial funding for students to attend conferences if submitting an abstract. See <http://gradschool.utah.edu/current-students/graduate-student-travel-assistance-award/> for available funding opportunities.
2. The Associated Students of the University of Utah (ASUU) also provides travel support for students. See <http://asuu.utah.edu/travel-and-conference-funding> for available funding opportunities. The odds for receiving funding are higher if funds are applied for early in the academic year rather than late.

XI. Changes in Guidelines

Policies and procedures may have changed since this document was approved. Check with The Graduate School web page (www.gradschool.utah.edu) and the Department Office for the most recent rules.