



GRADUATE HANDBOOK 2012-2013

August 2012

Master of Arts (M.A.)
Master of Science (M.S.)
Doctor of Philosophy (Ph.D.)

School of Sustainability
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Purpose of the Handbook

This handbook is a very important guide for graduate students admitted to the School of Sustainability (SOS), and for individuals who wish to apply to one of the sustainability graduate degree programs. Each current and prospective student should consult the handbook for information about the M.A., M.S., and Ph.D. in Sustainability.

The handbook is provided as an initial resource for answers to questions about the program, but students are also encouraged to consult with the graduate coordinator, their faculty advisor, or any member of the Graduate Committee. The primary reference for graduate students on rules and regulations is the Arizona State University [Academic Catalog](#). Each student should become familiar with the Academic Catalog and the [Graduate College](#) web site and policies.

Once admitted to the School of Sustainability, students have access to the SOS Graduate Student Community Blackboard site, where they will be able to find many of the materials in this handbook. Admitted students can access the site through [MyASU](#).

Student Responsibility

It is the responsibility of each student to understand and observe all procedures and requirements specified by the Graduate College and the School of Sustainability. **It is a requirement for all SOS students to read and understand the SOS Graduate Handbook and the ASU Academic Catalog.** Faculty and staff provide academic advice and assistance; however, the ultimate responsibility for meeting degree and other requirements remains with the student. All ASU students are also required to have an active ASU e-mail account and to check it frequently. Students may forward their ASU email to another preferred account. [Instructions on how to do this are found online.](#)

Academic Integrity

Graduate students are expected to be ethical in their multiple roles as students, researchers, teachers or supervisors of undergraduate students, and representatives of the School, Institute, and University. When in doubt about appropriate conduct, students should consult a faculty mentor to seek clarification. Breaches of academic integrity include, but are not limited to, the following:

- Engaging in any form of academic deceit, e.g., referring to materials, sources, or devices (camera phones, text messages, crib sheets, solution manuals, materials from previous classes, or commercial research services) not authorized by the instructor for use during an evaluation or assignment;
- Providing inappropriate aid to another student in connection with any evaluation or assignment;
- Engaging in plagiarism by using the ideas, words, or data of another person or persons without full and appropriate attribution;
- Engaging in plagiarism by claiming credit for the ideas, words, or data of another person or persons, or submitting work done by another as one's own;

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- Failing to follow ethical procedures for research involving human subjects, such as violating participants' confidentiality, or failing to maintain confidential or sensitive research data in a secure location;
 - Knowingly using data that do not meet appropriate standards for reliability and validity;
 - Failing to meet responsibilities to undergraduate students, such as failing to provide assistance during designated office hours;
 - Engaging in a romantic relationship with an undergraduate student whom the student supervises or evaluates in a classroom or research setting;
 - Falsifying or misrepresenting hours or activities in relationship to an internship, externship, research assistantship, field experience, workshop, or service learning experience;
 - Repeatedly failing to meet commitments and responsibilities, such as chronically missing deadlines, or failing to provide work promised to colleagues; and
 - Behaving in a way that reflects poorly on the School, Institute, and University while conducting research or participating in community activities as a representative of the School.

The School of Sustainability has a zero-tolerance policy for any form of academic malfeasance. Penalties for unethical behavior range from being placed on academic probation to dismissal from the program. Additional information about academic integrity policies of the University is available on the [Student Rights and Responsibilities web site](#).

Sexual Harassment

The University prohibits sexual harassment by employees and students and will not tolerate sexual harassment that interferes with an individual's work or educational performance or creates an intimidating, hostile, or offensive working, learning, or residential environment. [Additional information about sexual harassment can be found online](#).

Campus Safety

To report an emergency on campus, students can simply dial 911 or use one of the emergency call boxes found on campus. Non-emergency ASU Police or campus-safety matters should be directed to 480-965-3456. ASU has an opt-in, text-message alert system by which students can choose to receive a text message from ASU in times of an emergency. Students can [sign up for the service online](#). For additional safety resources and contacts, such as Counseling Services, Police, and Safety Escort Services, visit the [Safety Resources](#) web site.

What is the School of Sustainability?

The School of Sustainability was established to educate a new generation of leaders, through collaborative learning, transdisciplinary approaches, and problem-oriented training, to address some of the most pressing environmental, economic, and social challenges of the 21st century.

SOS builds on the extensive urban-environmental research portfolio of the [Global Institute of Sustainability](#) (GIOS), and the vision of the [New American University](#), to provide innovative education and research opportunities that will prepare students to find solutions to sustainability challenges relating to:

- Climate Change, Adaptation
- Ecosystem Alteration, Biodiversity Loss
- Energy, Materials, Technology
- Food Systems
- International Development
- Policy, Governance
- Social and Behavioral Change, Ethics
- Urbanization
- Water Quality, Scarcity

These challenge areas are part of the focus of the School's graduate curriculum.

The goals of SOS and GIOS include:

- Identifying the grand challenges of sustainability.
- Advancing knowledge for applied practical solutions.
- Creating new tools for improved decision-making.
- Prioritizing university-wide efforts towards sustainable practices.
- Building global research partnerships.

Graduate Degrees Offered

SOS offers the Master of Arts (M.A.), Master of Science (M.S.), and Doctor of Philosophy (Ph.D.) degrees in Sustainability. Requirements for the degree programs are described in the sections below.

The SOS graduate program is designed to increase students' understanding of systems dynamics, cascading effects, and scale, and to develop their ability to work on transdisciplinary teams to address sustainability challenges. After completing the program successfully, students will be able to:

- Understand the nature of coupled social and ecological systems;
- Evaluate the cascading effects and tradeoffs of policies, decisions, and actions related to sustainability;

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- Consider scale in the design and implementation of research questions, programs, and policies;
 - Demonstrate epistemological agility and literacy in multiple “conceptual languages;”
 - Integrate methods from multiple disciplines to design interdisciplinary research, creative activities, and applied projects;
 - Lead and participate effectively in teams comprised of members from many disciplines;
 - Communicate effectively with colleagues, policy makers, and the general public in both formal and informal settings; and
 - Employ responsible and ethical research and applied practices that consider both intergenerational and intragenerational equity in their design and implementation.

Who Should Apply?

SOS encourages applications from individuals with educational backgrounds and experience relevant to the School’s goals and challenge areas. Before applying, the prospective student should discuss with the graduate coordinator or a faculty member whether or not SOS offers a graduate degree that will meet the student’s needs. The M.A., M.S., and Ph.D. programs are offered during the day, and although there are a few online and evening courses, the programs cannot be completed online or in the evening.

Please see the SOS web site for answers to [frequently asked questions](#) about the application process or applicants can contact our [academic advising center](#).

Application Deadlines

The School of Sustainability only admits students to the M.A., M.S., and Ph.D. programs for the fall. For admission in the fall 2013 semester, complete applications including GRE scores and recommendations must be received by **December 15, 2012**. Late applications will not be accepted. Students must apply directly through the ASU Graduate College.

Application Process and Admission Requirements

The following information pertains to all three SOS graduate degrees.

Graduate College Requirements

All applicants must meet the [basic requirements of the Graduate College](#).

1. **Application.** ASU uses a [generic application](#) for all graduate programs.

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2. **\$70 application fee for domestic applicants and \$90 application fee for international applicants.** Applications submitted without the fee will not be processed or reviewed.
 3. **Official copy of transcripts.** Unofficial copies will not be accepted. Students should send transcripts from each university or college they have attended (ASU transcripts do not need to be sent). Official transcripts are normally sent from the issuing institutions in sealed envelopes, stamped, and verified by the issuing institutions.

Mail transcripts to:

Arizona State University
Graduate College
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003
Tempe, AZ 85287-1003

4. **US bachelor's degree.** Or the equivalent from a regionally accredited institution, or the equivalent of a US bachelor's degree from an international institution officially recognized by the country in which the institution is located. If the student is completing a bachelor's degree, a transcript will need to be sent both at the time of application and upon completion of the degree.
5. **Equivalent to a B average.** (Applies to the last sixty credit hours or ninety quarter hours of undergraduate coursework.) Students not meeting the minimum GPA requirement may still be considered, although the School may require additional documents that support the case for admission. (See School GPA requirement below.)
6. **Proof of measles immunization.** Documentation must be submitted to Student Health; see Immunization Verification at <http://students.asu.edu/forms/measles-immunization-form>. This is not absolutely necessary for applying to the program, but must be on file before enrolling for courses.

All application materials submitted to the Graduate College will be forwarded to the School of Sustainability.

School of Sustainability Requirements

In addition to the Graduate College's requirements, the School of Sustainability requires the following:

1. **Official copy of General Graduate Record Examination (GRE) test scores.** Have the official scores sent directly to the Graduate College. Test scores must be received directly from the agency administering the test. For more information on the GREs visit the [GRE Web site](#), or if the student lives near ASU, they can consider taking the [GRE at ASU](#). ASU's institution code is 4007 and the department code is 5199. Although minimum scores are not required, the average verbal and quantitative scores of those who are currently in the program are in the 70th percentile.
2. **Grade Point Average.** The School requires the equivalent of a minimum GPA of 3.25 in the last sixty credit hours or ninety quarter hours of undergraduate work. Applicants not meeting the minimum GPA requirement may still be considered, although the School will require additional documents that support the case for

admission. For details on the petition process, applicants should send an email to schoolofsustainability@asu.edu.

- 3. Recommendations.** Three recommendations are required. Applicants will be asked to provide contact information for their recommenders through the online application and will be asked whether or not they would like to waive the right to view the recommendations submitted. Upon completion and submission of the application, the recommendation form and instructions will automatically be sent to the recommender and they will be asked to submit their recommendations online. References should be from educators (preferred) or professionals familiar with the applicant's experience and capability for graduate work. It is highly recommended that the recommendations are academic in nature and address the applicant's experience and potential for success in a graduate program; however, we will also accept professional recommendations. If possible, at least one recommendation should be academic in nature. Applicants will be able to check the status of their recommendations online at MyASU.

Applicants will be rated on their writing ability, formal-speaking ability, reasoning and analysis, mathematics and statistics, and overall intellectual ability. Recommenders are asked to describe how they know the applicant and provide their opinion on the quality of the applicant's academic achievements, intellectual ability and capability to complete advanced work in a graduate program; aspects of the applicant's personality and character significant to graduate work; and special skills and experience as demonstrated in a vocation or profession.

- 4. Statement of intent.** All applicants must upload a statement of intent when completing the online application. In no more than six hundred words, students must explain why they are applying to the School of Sustainability, outline their background, describe expected outcomes from the program, identify potential faculty advisors (it is highly recommended that the applicant contact such faculty prior to submitting the application) and areas of research and study, and elaborate on how the degree will support their goals.
- 5. Resume or CV (optional).** Applicants may attach their resume or curriculum vita to their application. This is not required but is recommended.

Note: Taking courses for graduate credit as an undergraduate or non-degree student does not ensure admission to the program or acceptance of the acquired graduate credits as part of the Plan of Study.

Competencies

Transcripts will be used to evaluate basic competencies for graduate study in sustainability. Students with inadequate preparation may be required to remediate deficiencies as part of their program requirements.

International Students

SOS welcomes applications from international students. International students must meet ASU's general requirements for admission into graduate programs. The ASU [Graduate College has additional requirements for international students](#) and more information can be found on [ASU's Global Education](#) web site.

Review Process

The SOS Graduate Committee will review an application when the School of Sustainability has received all application materials from the Graduate College and after the December 15th deadline. Applicants can check the status of their application through [MyASU](#).

Master's Degrees (M.A. and M.S.)

Difference between M.A. and M.S.

Although both master's degree programs emphasize cross-disciplinary knowledge and skills, the M.A. degree is most appropriate for students inclined towards social sciences, planning, and related fields, and the M.S. degree for those inclined towards natural sciences, economics, or engineering. The core courses are identical; a student's past experience, intended focus of study, and elective preferences help determine whether the M.A. or M.S. is more appropriate.

Continuous Enrollment

Once admitted to a graduate degree program, master's students must be registered for a minimum of one credit hour (not audit) during all phases of their graduate education. This includes periods when they are engaged in research, working on or defending their thesis or applied project, or in any other way using university facilities or faculty time including the term in which they graduate.

Registration for every fall and spring semester is required. Summer registration is required for students who are completing culminating experiences, defending theses, or graduating from the degree program.

To maintain continuous enrollment, credit hours must:

- Appear on the student's Plan of Study, or
- Be research (592), thesis (599), or continuing registration (595), or
- Be a graduate-level course.

Grades of "W" and/or "X" are not considered valid registration for continuous enrollment purposes. "W" grades are received when students officially withdraw from a course after the drop/add period. "X" grades are received for audit courses. Additionally, students completing work for a course in which they received a grade of "I" must maintain continuous enrollment as defined previously. Graduate students have one year to complete work for an [incomplete grade](#); if the work is not complete and the grade changed within one year, the "I" grade becomes permanent.

Students planning to discontinue enrollment for a semester or more must request approval for a leave of absence. Student may [petition the Graduate College](#) for a leave of absence for a maximum of two semesters during their entire program. A petition for a leave of absence, endorsed by the members of the student's supervisory committee and the head of the academic unit, must be approved by the Graduate College dean. This request must be filed and approved before the anticipated absence.

A student on leave is not required to pay fees, but in turn is not permitted to place any demands on university faculty or use any university resources. Students who do not enroll for a fall or spring semester without an approved leave of absence by the Graduate College are considered withdrawn from the university under the assumption that they have decided to discontinue their program. Students removed for this reason may reapply for admission to resume their degree program; the

application will be considered along with all other new applications to the degree program.

Supervisory Committee

Students are assigned an initial faculty mentor when they enter the program (unless one has already been identified). A student's first responsibility is to identify a faculty member who is willing to act as his or her advisor throughout the program. This advisor will typically act as chair or co-chair of the student's supervisory committee. Once a faculty advisor has been identified, students consult with the advisor to form a supervisory committee made up of members who can provide an interdisciplinary perspective on the student's research.

A supervisory committee must be interdisciplinary and have at least three members, two of whom are ASU faculty members and senior [sustainability scientists or scholars](#). The chair or co-chair of the supervisory committee must be an [SOS teaching faculty member](#) or [approved by the Graduate College](#) to chair an SOS committee and must meet certain criteria. Usually, only tenured or tenure-track faculty are granted thesis-chair approval. Please check with the graduate coordinator about chair eligibility if there are any questions.

Faculty Emeriti who meet Graduate College criteria may serve as members or co-chairs on graduate supervisory committees. They may serve as chairs with the recommendation of the academic unit and approval of the Graduate College Dean on a case by case basis. Qualified individuals outside the university, upon the recommendation of the head of the academic unit and approval of the Graduate College, may serve as members of thesis and dissertation committees. All such requests must be submitted to the Graduate College Dean for approval using one of the appropriate [Committee Approval](#) form.

A faculty advisor should be selected by March 1st of the second semester, so that the advisor can provide effective direction for the remainder of the student's program. The remaining committee members should be selected by early in the third semester. Students should submit a completed *Supervisory Committee* form (found on the SOS Graduate Community Blackboard site) to the graduate coordinator. Signatures (or an email approval) are required from each person who will serve on the student's supervisory committee. In addition, the committee must be approved by the School's Graduate Committee Chair and the Graduate College.

Plan of Study

A Plan of Study (POS) must be filed online via [MyASU](#) with the Graduate College. The POS is a formal plan to meet degree requirements. It includes all courses to be taken and the designation of a thesis or non-thesis culminating experience. The POS is an agreement that the work specified on the POS will be sufficient for the desired degree. Master's students should submit the POS online by March 1st of the second semester and before they complete 50% of their coursework (i.e., fifteen credit hours).

[Instructions on Filing the Plan of Study](#)

Students must select courses that meet the requirements noted in the Graduate Handbook. They should consult the graduate coordinator if they have any questions. Submitting a POS that does not meet program requirements will delay the review process. Students who are seeking approval to have a course not listed as an approved course count towards one of their requirements should start by submitting a School of Sustainability *Petition Form* – the form can be found on the SOS Graduate Community Blackboard site.

After submitting the POS online, students should:

- Print out both the course page and the approval signature page and staple them together;
- Have the chair of the supervisory committee sign the pages; and
- Turn in the signed forms to the graduate coordinator.

-OR-

- Send a screen shot or electronic version of the POS to the chair and gain approval via email. The email can be forwarded to the graduate coordinator.

The student's POS will remain pending for academic unit review until the graduate coordinator receives documentation of chair approval of the POS. After approval is received, the POS is reviewed by the graduate coordinator to ensure the courses selected meet the program requirements and then the Graduate Committee Chair or Dean, for approval and signature. The School then approves the POS online, and it is routed to the Graduation Office and the Graduate College for review.

Course and committee changes can be made to the approved Plan of Study. Changes must first be approved by the student's chair or co-chairs and the academic unit and then it will be routed to the Graduation Section of the Registrar's Office for processing. Some changes to the Plan of Study require that an online petition be submitted to the Graduate College.

A POS, approved by the Dean of the Graduate College, must be on file before a student's thesis/project proposal is considered.

IMPORTANT NOTE: All student program forms, regardless of where they are processed, must first be submitted to the graduate coordinator. The graduate coordinator will ensure that forms are routed to the correct unit for processing.

Check Sheet

Until the Plan of Study is filed, students can track coursework requirements using the *Master's SOS Check Sheet* found on the SOS Graduate Community Blackboard site. The graduate coordinator will also keep track of each student's degree requirements and will keep a copy of the check sheet in the student's file. The check sheet will be used in the student's annual review. Students are encouraged to meet with the graduate coordinator to review their check sheets.

Course and Graduation Requirements

The Plan of Study comprises a minimum of thirty-three credit hours.

	Semester HRS
Required Core Courses	18
Required Challenge Area Seminars	
Required Solutions Workshops	3
Required Thesis	6
Electives (400-level or 500-level)	6
Total Semester Hours Required	33

Non-degree credit from ASU, combined with transfer from another institution, may not exceed nine credit hours on the POS. Only six credit hours of transfer credit from another institution may be included on the POS.

Required Core Courses (18 hours)

The core courses are designed to provide students from diverse backgrounds with method and theories for the study of sustainability. They explore the link between concepts of sustainability and systems approaches to knowledge, and develop the integrative methods needed to work across the disciplines on sustainability problems. The following two courses are required of all students:

SOS 510: Perspectives on Sustainability (3) (Required for all students in the first semester)

University-wide course covering perspectives and relevant theories on sustainability. Using case studies, faculty and students from engineering, architecture, humanities, business social sciences, and natural sciences exchange ideas on the major challenges involved in creating a sustainable future at local, national, and global levels.

SOS 511: Methodology of Sustainability Research and Problem Solving (3) (Required for all students in the first semester)

Introduces students to research methods, both quantitative and qualitative, that may be employed in sustainability science. The course introduces methods from the social and natural sciences; demonstrates how the appropriate choice of method depends upon its relevance to the underlying research question and the data available to address the question; and emphasizes the unavoidable role of implicit and explicit assumptions in the choice of a research method.

In addition to these two courses, students are required to take nine hours from the following courses:

SOS 512: *Sustainable Resource Allocation (3)*

Microeconomic principles of resource allocation applied to environmental goods and services; external environmental effects and environmental public goods; decision-making under uncertainty; adapting to and mitigating environmental changes.

SOS 513: *Science for Sustainability (3)*

Carbon cycle; nutrient cycles; carbon and nutrients in the oceans; climate change; oxygen and ozone; solid-waste pollution; urban-air pollution.

SOS 514: *Human Dimensions of Sustainability (3)*

Concepts and definitions of the human dimensions of sustainability; the role of attitudes and values in shaping sustainability goals, practices, and programs; the diversity of values and socio-cultural contexts relating to sustainability; bottom-up and top-down sustainable policy development, social-data-collection methodologies.

SOS 515 *Industrial Ecology and Design for Sustainability (3)*

Conceptual, ethical, and practical challenges in the design, manufacture, and lifecycle performance of products; environmental evaluation via materials-flow analysis and life-cycle assessment; global economic, environmental, cultural, and social aspects of competitive and functional product development and manufacture.

-OR-

CEE 598

Covers fundamental and advanced concepts of the life cycle assessment (LCA) framework exploring products, services, activities, and infrastructure systems. Key concepts for system boundary selection, functional unit selection, inventorying, impact assessment, and interpretation stages are examined with a focus on energy and environmental assessment.

SOS 516: *Science, Technology, and Public Affairs (3)*

Political, economic, cultural, and moral foundations of science and technology policy and governance in democratic society.

- OR -

SOS 518: *Uncertainty and Decision Making (3)*

Explores uncertainty and its relationship to decision making, with a particular focus on the ways that science is applied in order to improve decisions. A central theme is the relationship among uncertainty, scientific prediction, and decision making, especially with regard to politically charged issues, e.g., as related to management of the environment.

SOS 517: *Sustainability & Enterprise (3)*

Examines the evolving interface between sustainability and human

enterprise. Explores and reviews key fundamental concepts in the sustainability arena. Delves into specific case studies of attempts by current businesses to become “greener” and “more sustainable”, Alternative enterprise models and examples of businesses that are using the current context to redefine the sustainability and enterprise interface will be also explored and discussed. Explores and applies an integrated approach to sustainability and enterprise.

Note: Additional courses may be added to this list.

Required Challenge Area Seminars

Challenge-area seminars provide students with a strong foundation (content knowledge, big theory, and big studies) in the main themes of the School. Students are required to complete at least three challenge area seminar hours related to their area of focus.

SOS 530: *International Development and Sustainability (3)*

Historical roots of the idea of development; economic theories of growth and their implications for sustainability; interrelationship among population growth, food security, poverty, inequality, urbanization, technological change, international trade, and environmental change at local, regional, and global scales.

SOS 532: *Sustainable Urban Dynamics (3)*

Human and physical processes shaping urban ecologies and environments; human-environment interactions in the context of an urban region; effect of institutional and regulatory frameworks on the resilience and sustainability of social and urban-ecological systems; urban design, materials, transport, planning, and regulation.

SOS 533: *Sustainable Water (3)*

Hydrological, legal, political, and ecological implications of alternative water-management strategies; effect of institutional and regulatory frameworks; changes in water demand and supply due to human (population growth, economic changes) and natural (drought, climate change) factors.

SOS 534: *Sustainable Energy and Material Use (3)*

Sustainable engineering; overall energy needs and impacts; thermodynamics, heat transfer, and fluid mechanisms; atmospheric energy systems; field investigation; current and future urban energy systems.

SOS 535: *Sustainable Ecosystems (4)*

How human activities and management practices alter biodiversity, ecosystem functioning, and the provisioning of ecosystem services; use of economic and other social-science perspectives to estimate the value of ecosystem services; evaluation of options for achieving the

sustainable flow of services from ecosystems.

SOS 536: *Food System Sustainability (3)*

Takes a broad view of food systems and the sustainability of such systems. Students are exposed to concepts, theory, methods and empirical analyses from diverse disciplines, including agro-ecology, agronomy, political science, agricultural economics, geography, anthropology and food and nutrition studies.

SOS 591: *Legal Issues in Sustainability (3)*

Addresses law as both an enabler and an impediment to the identification and adoption of sustainable practices. Looks at the intended and unintended impacts of the law on the social, environmental, and economic components of sustainability solutions.

SOS 598: *Urban Ecological Systems (3)*

Deals broadly with the general topic of ecology of and in urban environments, the ecosystem in which over half the world's population lives. Covers the physical, ecological, and social environment of cities and how these spheres can be integrated to advance understanding and effective management of urban ecological systems.

SOS 598: *Sustainable Futures Studio (3)*

This course explores methods for thinking about the future and designs participatory future-oriented engagements. Focused on technology and the city, students will investigate the complex socio-technical relations that sprout up in the city that help shape future prospects for sustainability. Through study of theoretical and practical approaches to investigate socio-technical change, this course evolves to ask critical questions about responsible innovation and civic engagement. The focal project for this course will involve engaging local citizens in deliberative exercises about the potential role of nanotechnology in transforming Phoenix.

SOS 598: *Urban Infrastructure Anatomy and Social Development (3)*

Understanding how built environment infrastructure systems interact with ecosystem services is a critical for policies and decisions directing urban sustainability. The "Urban Infrastructure Anatomy and Sustainable Development" (SOS 598) course will bring together students from several disciplines to develop a semester-long research project focused on a particular urban sustainability problem in Phoenix. During the semester, students will be given background on how infrastructure systems work and are interdependent, and will explore tools and methods for urban sustainability assessment with peers from several disciplines. As a class, students will evaluate a particular urban sustainability problem for Phoenix, interact with local policy and decision makers in developing solutions, and present their findings at the end of the semester to the ASU community.

Note: Additional courses may be added to this list.

Required Solutions Workshops

Solutions workshops provide students with experience solving real-world problems that involve multiple sustainability challenges. They are problem-based and not specifically attached to a single main theme.

Students are required to complete at least three hours of solutions workshops. Please check with the graduate coordinator for a current list of workshops offered.

Elective Courses

Subject to satisfying pre-requisites and co-requisites, students pursue six credit hours of electives. Electives should be chosen in consultation with the student's chair. Electives can be taken outside of the School of Sustainability – A [comprehensive list of possible sustainability and sustainability-related courses](#) can be found online.

Students are encouraged to take professional development courses that are appropriate to their interests (e.g., the SOS reading group, brown-bag discussion group, [Preparing Future Faculty](#) coursework). These courses will most likely count as electives, subject to approval by the student's chair.

Thesis (6 hours)

Students are required to devote six hours to writing the thesis (SOS 599). Students will not be able to enroll in thesis hours until they have an approved supervisory committee on their POS. Students may register for research hours (SOS 592) with approval from their faculty advisor, but these hours are not necessary for the Plan of Study. All master's degree candidates must enroll for at least one semester hour of credit within the School of Sustainability during the semester or summer session in which the thesis is defended.

Students should submit a thesis proposal to the supervisory committee for review and approval before they embark on research, and at least one semester before they expect to complete all of their coursework. Normally the proposal is approved prior to the third semester in the program. The *SOS Master's Thesis/Non-Thesis Proposal Approval Form*, available on the *SOS Graduate Community Blackboard site* should be completed and signed by the student and the supervisory committee when the proposal has been approved. The completed form, together with a digital copy of the proposal, must be submitted to the graduate coordinator.

All theses are required to meet a certain standard as a recognizable product of ASU. The student's committee, department and the Graduate College expect to see evidence of careful attention to style and format in the document that the student presents as part of their culminating experience. Please follow the [formatting guidelines](#) set by the Graduate College. For more information on thesis style, students should consult the *Format Manual* and their faculty advisor.

The student's supervisory committee will conduct an oral examination in defense of the thesis. Master's thesis defenses are open to all members of the university community. Oral defenses are held on an ASU campus during regular business hours to facilitate student, faculty, and public accessibility. Students are encouraged to defend the thesis during the fall or spring semester since many faculty members are not on campus over the summer and the Graduate College has strict rules about committee members being present at the defense. Staff in the Academic Advising Center can help schedule the defense location, if necessary. Tips on [preparing for the defense](#) can be found online.

At a date agreed upon by the supervisory committee but at a minimum of two weeks prior to the oral defense, the student must submit a final draft of the thesis to all committee members for review. Failure to meet this deadline may result in the postponement of the defense date.

At least ten working days prior to the oral defense, the student must send a copy of their thesis for format evaluation to gradformat@asu.edu and schedule their defense through [MyASU](#). Please consult the Graduate College's [Graduation Deadlines and Procedures](#) Web site and the [10 Working-Day Calendar](#) on this site.

After the defense is scheduled with the Graduate College, the student will receive a defense announcement template from the graduate coordinator where they will provide the thesis title page, abstract page, list of committee members, and the date, time, and location of the defense. The graduate coordinator will then post the announcement on the SOS web site and send an e-mail notice to students and faculty prior to the defense.

After a student completes the oral defense of the thesis, he or she will want to take care of [final arrangements to ensure completion of the degree](#). The student must also send an electronic copy of their thesis to the graduate coordinator.

Transfer Credit

Transfer credits cannot be applied toward minimum degree requirements for an ASU degree if they have been counted toward the minimum requirements for a previously awarded degree. Hours transferred from other institutions may not exceed 20% of the total minimum credit hours required for a master's degree. The inclusion of transfer courses on a Plan of Study is subject to approval from the School of Sustainability and the Graduate College.

Non-degree credit from ASU, combined with non-degree credit from another institution, cannot exceed nine credit hours on the master's Plan of Study. Additionally, transfer credits must have been earned within the time frame specified by Graduate College policy to be applied to the master's Plan of Study. That policy states that all coursework on a Plan of Study must be taken within three years of the semester during which the first course listed on the POS was taken.

Courses being transferred must meet the following requirements:

- taken at an accredited college or university
- graduate-level
- student must have obtained an "A" or "B" grade or the equivalent in the course(s)

-
- approved by supervisory committee as part of the Plan of Study

The taking of courses for graduate credit as an undergraduate or non-degree student does not ensure admission to the program or acceptance of the acquired graduate credits as part of the Plan of Study.

Time Limit

Students should complete the master's degree program within two years. Exceptions must be approved by the supervisory committee and the head of the academic unit.

Concurrent Master's Degrees

A master's degree in sustainability may be taken concurrently with another master's degree through a specific, cooperative arrangement with another ASU schools or department. Students must be admitted separately to each degree program. The Plan of Study for the M.A. or M.S. in Sustainability requires thirty-three credit hours, as stated above. A maximum of 20 percent of the minimum total credit hours for the completion of both degrees may be common hours shared between the Plans of Study provided that the corresponding courses appear on the student's Plan of Study in both degree programs.

The School of Sustainability presently has an agreement with the School of Public Affairs to offer concurrent degrees with the Master of Public Policy (MPP) and the Master of Public Administration (MPA). The School also has an agreement with the School of Geographical Sciences and Urban Planning to offer a concurrent degree with the Master of Urban and Environmental Planning (MUEP). Students must be admitted to both programs first to seek approval to pursue a concurrent arrangement.

Advising

To ensure that academic programs run as smoothly as possible, students should consult with their faculty advisors/mentors prior to registering for classes each semester. All students are expected to identify a faculty advisor no later than the third semester in the program (ideally by March 1st of the second semester). If they are unable to identify and advisor, they should consult with their assigned mentor or the Chair of the Graduate Committee.

Sample Plans of Study

Sample Plans of Study can be found on the SOS Graduate Community Blackboard site. These are provided as examples only. Each student's program will be unique to the student's individual needs and interests. The plans estimate time to complete all coursework and thesis hours. Completion of the thesis or applied project will require additional time.

The *Master's SOS Check Sheet* on the Blackboard site includes a list of all required courses for the degree program, as well as exit requirements. All required and core SOS graduate courses are offered on a once-a-year or every-other-year basis. Thus, failure to complete a required graduate course during the appropriate semester of enrollment may delay graduation. These tracking documents have been developed to assist students and their advisors to monitor satisfactory completion of coursework.

Important Milestones in the Masters Plan of Study

FIRST YEAR

FALL

- Attend orientation activities and graduate forums.
- Meet with faculty mentor/advisor: discuss POS and program goals.
- Focus on successfully completing SOS 510 and SOS 511.
- Attend a POS workshop and use check sheet to create a draft POS.
- Attend funding workshops and investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.

SPRING

- Attend welcome back event and graduate forums.
- Meet with faculty mentor/advisor: continue discussing POS and program goals as well as forming a supervisory committee.
- By March 1 – submit Annual Review/Request for Funding form.
- By March 1 – identify supervisory committee chair/co-chair and submit POS with the chair's approval.
- Seek out summer internship/research opportunities; organize summer thesis research plans.
- By end of semester – have an approved supervisory committee and an approved thesis or applied project proposal.
- Investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.

SECOND YEAR

FALL

- Attend orientation activities and graduate forums.
- Meet with supervisory committee to discuss thesis/non-thesis progress.
- Meet with Graduate Coordinator to review updates to check sheet and POS.
- Investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.

SPRING

- Attend welcome back event and graduate forums.
- Meet with supervisory committee very early in the semester to discuss thesis/non-thesis progress and agree on a goal for the defense date.
- Non-Thesis: Enroll in SOS 593
- By February 15 – Apply for graduation and review and follow [Important Graduate College Deadlines](#).
- By March 1 – submit Annual Review form.
- Schedule defense of thesis or non-thesis project.
- Thesis: Submit draft to Graduate College for format review.
- Defend and after defense, submit required forms indicating approval/passing and all required electronic copies of the thesis or non-thesis project. Update POS.

Doctoral Degree (Ph.D.)

Continuous Enrollment

Once admitted to a graduate degree program, doctoral students must be registered for a minimum of one credit hour (not audit) during all phases of their graduate education. This includes periods when they are engaged in research, culminating exams, working on or defending their dissertation prospectus or final dissertations, or in any other way using university facilities or faculty time including the term in which they graduate.

Registration for every fall and spring semester is required. Summer registration is required for students who are completing culminating experiences, defending theses, or graduating from the degree program.

To maintain continuous enrollment, credit hours must:

- Appear on the student's Plan of Study, or
- Be research (792), thesis (799), or continuing registration (795), or
- Be a graduate-level course.

Grades of "W" and/or "X" are not considered valid registration for continuous enrollment purposes. "W" grades are received when students officially withdraw from a course after the drop/add period. "X" grades are received for audit courses. Additionally, students completing work for a course in which they received a grade of "I" must maintain continuous enrollment as defined previously. Graduate students have one year to complete work for an [incomplete grade](#); if the work is not complete and the grade changed within one year, the "I" grade becomes permanent.

Students planning to discontinue enrollment for a semester or more must request approval for a leave of absence. Student may [petition the Graduate College](#) for a leave of absence for a maximum of two semesters during their entire program. A petition for a leave of absence, endorsed by the members of the student's supervisory committee and the head of the academic unit, must be approved by the Graduate College dean. This request must be filed and approved before the anticipated absence.

A student on leave is not required to pay fees, but in turn is not permitted to place any demands on university faculty or use any university resources. Students who do not enroll for a fall or spring semester without an approved leave of absence by the Graduate College are considered withdrawn from the university under the assumption that they have decided to discontinue their program. Students removed for this reason may reapply for admission to resume their degree program; the application will be considered along with all other new applications to the degree program.

Supervisory Committee

Students are assigned an initial faculty mentor when they enter the program (unless one has already been identified). A student's first responsibility is to identify a faculty member who is willing to act as his or her advisor throughout the program. This advisor will typically act as chair or co-chair of the student's supervisory committee.

Once a faculty advisor has been identified, students consult with the advisor to form a supervisory committee made up of members who can provide an interdisciplinary perspective on the student's research.

A supervisory committee must be interdisciplinary and have at least three members, two of whom are ASU faculty members and senior [sustainability scientists or scholars](#). The chair or co-chair of the supervisory committee must be an [SOS teaching faculty member](#) or [approved by the Graduate College](#) to chair an SOS committee and must meet certain criteria. Usually, only tenured or tenure-track faculty are granted dissertation-chair approval. Please check with the graduate coordinator about chair eligibility if there are any questions.

Faculty Emeriti who meet Graduate College criteria may serve as members or co-chairs on graduate supervisory committees. They may serve as chairs with the recommendation of the academic unit and approval of the Graduate College Dean on a case by case basis. Qualified individuals outside the university, upon the recommendation of the head of the academic unit and approval of the Graduate College, may serve as members of thesis and dissertation committees. All such requests must be submitted to the Graduate College Dean for approval using one of the appropriate [Committee Approval](#) form.

The faculty advisor should be selected by the end of the third semester if entering with a bachelor's degree, or by March 1st of the second semester if entering with a master's degree, so that the advisor can provide effective direction for the remainder of the student's program. The remaining committee members should be selected as soon as possible and no later than the time they file their Plan of Study or early in the third semester (if entering with a master's degree). Students should submit a completed *Supervisory Committee* form (found on the SOS Graduate Community Blackboard site) to the graduate coordinator. Signatures (or an email approval) are required from each person who will serve on the student's supervisory committee. In addition, the committee must be approved by the School's Graduate Committee Chair and the Graduate College.

Plan of Study

A Plan of Study (POS) must be filed online via [MyASU](#) with the Graduate College. The POS is a formal plan to meet degree requirements. It includes all courses as well as research and dissertation hours. The POS is an agreement that the work specified on the POS plus the comprehensive exam, dissertation prospectus, and dissertation will be sufficient for the desired degree. Doctoral students should submit the POS online *before* they complete 50% of their coursework and by March 1st of the fourth semester if entering with a bachelor's degree, or by the end of the second semester if entering with a master's degree.

[Instructions on Filing the Plan of Study](#)

Students must select courses that meet the requirements noted in the Graduate Handbook. They should consult the graduate coordinator if they have any questions. Submitting a POS that does not meet program requirements will delay the review process. Students who are seeking approval to have a course not listed as an approved course count towards one of their requirements should start by submitting

a School of Sustainability *Petition Form* – the form can be found on the SOS Graduate Community Blackboard site.

After submitting the POS online, students should:

- Print out both the course page and the approval signature page and staple them together;
- Have the chair of the supervisory committee sign the pages; and
- Turn in the signed forms to the graduate coordinator.

-OR-

- Send a screen shot or electronic version of the POS to the chair and gain approval via email. The email can be forwarded to the graduate coordinator.

The student's POS will remain pending for academic unit review until the graduate coordinator receives documentation of chair approval of the POS. After approval is received, the POS is reviewed by the graduate coordinator to ensure the courses selected meet the program requirements and then the Graduate Committee Chair or Dean, for approval and signature. The School then approves the POS online, and it is routed to the Graduation Office and the Graduate College for review.

Course and committee changes can be made to the approved Plan of Study. Changes must first be approved by the student's chair or co-chairs and the academic unit and then it will be routed to the Graduation Section of the Registrar's Office for processing. Some changes to the Plan of Study require that an online petition be submitted to the Graduate College.

A POS, approved by the Dean of the Graduate College, must be on file before preparing for the comprehensive exam.

IMPORTANT NOTE: All student program forms, regardless of where they are processed, must first be submitted to the graduate coordinator. The graduate coordinator will ensure that forms are routed to the correct unit for processing.

Check Sheet

Until the Plan of Study is filed, students can track coursework requirements using the *Doctoral SOS Check Sheet* (found on the SOS Graduate Community Blackboard site). The graduate coordinator will also keep track of each student's degree requirements and will keep a copy of the check sheet in the student's file. The check sheet will be used in the student's annual review. Students are encouraged to meet with the graduate coordinator to review their check sheets.

Course and Graduation Requirements

Students may be admitted to the Ph.D. program with either a bachelor's or a master's degree from a regionally accredited institution, or the equivalent of a US bachelor's degree from an international institution officially recognized by the country in which it is located.

If admitted with a bachelor's degree, students must complete a minimum of eighty-four credit hours. If admitted with a master's degree, they must complete a minimum of fifty-four hours.

	Semester Hours	
	Admitted with a Bachelor's	Admitted with a Master's
Required Core Courses	21	15*
Required Challenge Area Seminars		
Required Solutions Workshops	6	3*
Required Research	12	12
Required Dissertation	12	12
Electives <i>**Of which, a maximum of 6 hours can be at the 400-level ***500-level or higher</i>	33**	12***
Total Semester Hours Required	84	54

*Assuming relevant coursework at the master's level.

Required Core Courses

(21 hours if admitted with a master's and 15 hours if admitted with a bachelor's)

Required core courses are the same as those for the master's degrees.
(See pages 11-12).

In addition to *SOS 510* and *SOS 511*, students must take six hours if admitted with a master's degree, and nine hours if admitted with a bachelor's degree, from the list of required core courses (See pages 11-12).

Required Challenge Area Seminars

(These have been combined with required core.)

Required Solutions Workshops

(3 hours if admitted with a master's and 6 hours if admitted with a bachelor's)

Solutions workshops provide students with experience solving real-world problems that involve multiple sustainability challenges. They are problem-based and not specifically attached to a single main theme. Please check with the graduate coordinator for a current list of workshops offered.

Required Research and Dissertation (24 hours)

At least twelve hours of the approved Ph.D. program must be SOS 792 Research, and at least twelve hours must be SOS 799 Dissertation. Students will not be able to enroll in dissertation hours until they have an approved supervisory committee on their POS. Students may not apply credit hours earned for a Ph.D. previously awarded at ASU or another institution. At least thirty hours (which may include research credit) of the approved Ph.D. program and twelve dissertation hours must be completed after admission to a Ph.D. program at ASU. A maximum of twelve dissertation hours is permitted on the Plan of Study.

SOS 792 Research

SOS 799 Dissertation

Please see additional information about the dissertation on the following page.

Elective Courses (12 hours if admitted with a master's and 33 hours if admitted with a bachelor's)

Subject to satisfying pre-requisites and co-requisites, students admitted with a master's degree select a minimum of twelve credit hours of electives at the 500-level. Students admitted with a bachelor's degree select a minimum of thirty-three credit hours from the list, of which a maximum of six hours can be at the 400-level. Electives should be chosen in consultation with the student's chair. Electives can be taken outside of the School of Sustainability – A [comprehensive list of possible sustainability and sustainability-related courses](#) can be found online.

Students are encouraged to take professional development courses that are appropriate to their interests (e.g., the SOS reading group, brown-bag discussion group, [Preparing Future Faculty](#) coursework). These courses will most likely count as electives, subject to approval by the student's chair.

Master's in Passing

The Master's in Passing (MIP) option is offered to exemplary students accepted into the Ph.D. program without a master's degree. Students who complete the requirements will be offered either an M.A. or M.S. in Passing. The Master's in Passing option is not automatically available to all Ph.D. students. To be eligible, a student must meet the following criteria, and follow these steps.

1. Complete thirty-three hours of coursework that meet the requirements for the non-thesis master's degree;

Courses taken before the student was admitted to the Ph.D. program CANNOT be used on the MIP POS. Please check with the graduate coordinator for more information about what can and cannot be used.

2. Have a 3.25 or higher ASU GPA in all courses numbered 500 and above, as well as in all coursework that is included on the Plan of Study;
3. Have selected a supervisory committee;

-
4. Submit a portfolio for review by the supervisory committee consisting of the following work (papers should include grades received and instructor comments):
 - a. One exemplary research paper
 - b. One exemplary paper or project of an applied nature
 - c. A short paper (such as an essay or an opinion piece) or a poster
 - d. A reflective essay discussing the papers that looks back at the learning demonstrated in the pieces and forward to knowledge and skills that the student needs to develop
 5. When the portfolio is approved by the supervisory committee, see the graduate coordinator to complete a [Master's in Passing Request](#) form and obtain all relevant signatures;
 6. The student will be prompted by the Graduate College to complete an MIP POS.
 7. Apply for graduation or the MIP will not be awarded.

Note: Students who include 30 hours from a previously awarded master's degree on their doctoral Plan of Study are not eligible for a Master's in Passing.

Please see the Graduate Coordinator for more detailed instructions.

Comprehensive Examination

When students have completed or are close to completing the coursework in an approved Plan of Study, they may request permission to take the comprehensive examinations. Students must be in good academic standing regarding GPA requirements prior to taking doctoral comprehensive examinations. Ph.D. comprehensive examinations are administered by the student's supervisory committee. The supervisory committee should be diverse and not represent a single discipline or narrow field of expertise.

The student must fill out Part I of the [Report of Doctoral Comprehensive Examination](#) form and submit it to the examining committee chair for completing of the additional Parts and signatures from the examining committee.

In preparation for the comprehensive examinations, the student will prepare a short research statement (approximately 600 words) and a related bibliography for review by their supervisory committee. Students should request reading suggestions from committee members before creating the final bibliography for supervisory committee approval. The candidate and committee should prepare the reading lists and bibliography taking into account the following guidelines: Readings should be relevant to the dissertation, but cover bodies of knowledge broader than what is required to write the dissertation. Candidates should select readings that demonstrate how their research relates to broader contexts of sustainability research and practice. The readings should provide insight into theory, methods, and substantive knowledge relevant to the dissertation and broader contexts.

Based on the research statement and bibliography, each committee member will prepare relevant questions, which the committee chair will compile into a single examination. The student will answer the questions in written format. The supervisory committee will review the written responses and will assign any of the

following designations: pass as written, pass dependent on satisfactorily rewritten or revised questions, retake, and fail.

Students should take the comprehensive examinations within one year of finishing their coursework. Students must petition the Graduate College to retake the comprehensive exam if they fail, and reexamination must occur no sooner than three (3) months, and no later than one year, from the original exam date. Only one reexamination will be approved.

After passing the comprehensive examination, the student should submit the form with committee signatures to the graduate coordinator who will forward the completed form to the Graduate College.

Dissertation Prospectus

In careful consultation with the supervisory committee, the candidate will prepare a written dissertation proposal. The format of the proposal will be determined by the supervisory committee but should include an original and meaningful research question, a summary of appropriate theory, methods, data, and knowledge, and a clear and realistic plan for completing the dissertation requirements in a timely fashion. The candidate may elect to submit the dissertation proposal in the format of a dissertation improvement grant proposal to the National Science Foundation or other appropriate funding agencies. An oral examination in defense of the dissertation prospectus is required, and will be scheduled by the supervisory committee no later than six months after a student passes the comprehensive examination. The dissertation proposal defense should occur after successful completion of the comprehensive examinations.

The defense will be public but the committee will also meet privately with the candidate. The student should work on scheduling the defense with the Graduate Coordinator. After the defense is scheduled, the student will receive a defense announcement template from the graduate coordinator where they will provide the dissertation title page, abstract page, list of committee members, and the date, time, and location of the defense. The graduate coordinator will then send an e-mail notice to students and faculty prior to the defense.

The student needs to complete Part I of the [Results of the Doctoral Dissertation Proposal/Prospectus](#) Form and submit it to the examining committee chair for approval. Following approval of the dissertation prospectus, signatures of the committee should be entered in Part II of the form. The completed form should be immediately submitted by the student to the graduate coordinator who will make sure the status is entered in the system.

Admission to Candidacy

Ph.D students achieve candidacy status in a letter from the Dean of the Graduate College after passing the comprehensive examinations and successfully defending the dissertation prospectus. The Graduate College dean sends a letter admitting the student to candidacy after receiving the Results of the Doctoral Dissertation Proposal/Prospectus form reflecting successful approval of the prospectus. If the student fails to advance to candidacy within the time limit set by Graduate College

policy (see Time Limit section below), the School may recommend withdrawal of the student from the Ph.D. program.

Dissertation

All dissertations are required to meet a certain standard as a recognizable product of ASU. The student's committee, department and the Graduate College expect to see evidence of careful attention to style and format in the document that the student presents as part of their culminating experience. Please follow the [formatting guidelines](#) set by the Graduate College. For more information on dissertation style, students should consult the *Format Manual* and their faculty advisor.

The student's supervisory committee will conduct an oral examination in defense of the dissertation. Doctoral dissertation defenses are open to all members of the university community. Oral defenses are to be held on an ASU campus during regular business hours to facilitate student, faculty, and public accessibility. Students are encouraged to defend the dissertation during the fall or spring semester since many faculty members are not on campus over the summer and the Graduate College has strict rules about committee members being present at the defense. Staff in the Academic Advising Center can help schedule the defense location, if necessary. Tips on [preparing for the defense](#) can be found online.

At a date agreed upon by the supervisory committee but at a minimum of two weeks prior to the oral defense, the student must submit a final draft of the dissertation to all committee members for review. Failure to meet this deadline may result in the postponement of the defense date.

At least ten working days prior to the oral defense, the student must send a copy of their dissertation for format evaluation to gradformat@asu.edu and schedule their defense through [MyASU](#). Please consult the Graduate College's [Graduation Deadlines and Procedures](#) Web site and the [10 Working-Day Calendar](#) on this site.

After the defense is scheduled with the Graduate College, the student will receive a defense announcement template from the graduate coordinator where they will provide the dissertation title page, abstract page, list of committee members, and the date, time, and location of the defense. The graduate coordinator will then post the announcement on the SOS web site and send an e-mail notice to students and faculty prior to the defense.

After a student completes the oral defense of the dissertation, he or she will want to take care of [final arrangements to ensure completion of the degree](#). The student must also send an electronic copy of their thesis to the graduate coordinator.

Transfer Credit

Transfer credits may not be applied towards minimum degree requirements for an ASU degree if they have been counted toward the minimum requirements for a previously awarded degree. There is an exception to this for students entering with a master's degree. At ASU, a Doctoral degree requires a minimum of eighty-four credit hours. However, the School of Sustainability allows students entering with a master's

degree to apply up to thirty hours from their master's degree, so they can earn their Doctoral degree with a minimum of fifty-four credit hours.

Up to twelve credit hours of credit taken at another institution or at ASU while in non-degree status, and not counted toward a previous degree, may be counted toward the minimum credit hours required for an ASU doctoral degree. There are cases in which a petition is required to transfer credit, so please consult with the graduate coordinator. In all cases, the inclusion of transfer courses in a Plan of Study is subject to approval of the School of Sustainability and the Graduate College.

Courses being transferred must meet the following requirements:

- taken at an accredited college or university
- graduate-level
- student must have obtained an "A" or "B" grade or the equivalent in the course(s)
- approved by supervisory committee as part of the Plan of Study

The taking of courses for graduate credit as an undergraduate or non-degree student does not ensure admission to the program or acceptance of the acquired graduate credits as part of the Plan of Study.

Time Limit

All students are expected to meet the program milestones. Failure to meet these milestones could subject students to probation and a request to leave the program. Beyond the School of Sustainability's internal requirements, the Graduate College stipulates that all doctoral students must complete all program requirements within a ten-year period. The ten-year period starts with initial enrollment in the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years of passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations. To request an exception, students must submit a [Petition to the Graduate College](#).

Advising

To ensure that academic programs run as smoothly as possible, students should consult with their faculty advisors/mentors prior to registering for classes each semester. All students are expected to identify a faculty advisor no later than the third semester in the program (ideally by March 1st of the second semester). If they are unable to identify an advisor, they should consult with their assigned mentor or the Chair of the Graduate Committee.

Sample Plans of Study

Sample Plans of Study can be found on the SOS Graduate Community Blackboard site. These are provided as examples only. Each student's program will be unique to the student's individual needs and interests. The plans estimate time to complete all

coursework and thesis hours. Preparation for the comprehensive exams and defending the dissertation will require additional time.

The *Doctoral SOS Check Sheet* on the Blackboard site includes a list of all required courses for the degree program, as well as exit requirements. All required and core SOS graduate courses are offered on a once-a-year or every-other-year basis. Thus, failure to complete a required graduate course during the appropriate semester of enrollment may delay graduation. These tracking documents have been developed to assist students and their advisors to monitor satisfactory completion of coursework.

***Important Milestones in the Doctoral Plan of Study
(entering with a master's degree)***

FIRST YEAR

FALL

- Attend Fall Welcome activities and Camp T.
- Meet with faculty mentor/advisor: discuss POS and program goals.
- Focus on successfully completing SOS 510 and SOS 511.
- Attend Graduate Forums
- Attend a POS workshop and use check sheet to create a draft POS.
- Attend funding workshops and investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.
- Seek and plan professional and academic development experiences: conferences, workshops, and publication opportunities to disseminate original research.

SPRING

- Attend welcome back event and graduate forums.
- Meet with faculty mentor/advisor: continue discussing POS and program goals as well as forming a supervisory committee.
- By March 1 – submit Annual Review/Request for Funding form.
- By March 1 – identify supervisory committee chair/co-chair and submit POS with the chair's approval.
- By end of semester – be thinking about supervisory committee and have a working dissertation title.
- Seek out summer internship/research opportunities; organize summer thesis research plans.
- Investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.

SECOND YEAR

FALL

- Attend Fall Welcome activities, Camp T, and graduate forums.
- Meet with faculty mentor/advisor: continue discussing POS and program goals as well as forming a supervisory committee.
- By September 1 – have an approved supervisory committee.
- Investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.
- Seek and plan professional and academic development experiences: conferences, workshops, and publication opportunities to disseminate original research.

SPRING

- Attend welcome back event and graduate forums.
- Meet with supervisory committee to discuss comprehensive exam and dissertation prospectus expectations.
- Compile a bibliography and send it to the supervisory committee in preparation for the comprehensive exam.
- By March 1 – update POS and submit Annual Review/Request for Funding form.
- Seek out summer internship/research opportunities; organize summer thesis research

FALL

- Attend Fall Welcome activities, Camp t, and graduate forums.
- Coursework should be complete.
- Meet with supervisory committee to discuss dates and plans for comprehensive exam and dissertation prospectus.
- Pass comprehensive exam.
- Successfully defend dissertation prospectus.
- Advance to candidacy.
- Meet with Graduate Coordinator to review updates to check sheet and POS.
- Investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.
- Seek and plan professional and academic development experiences: conferences, workshops, and publication opportunities to disseminate original research.

SPRING

- Attend Fall Welcome activities, Camp T, and graduate forums.
- Meet with supervisory committee very early in the semester to discuss dissertation progress and agree on a goal for the defense date.
- By February 15 – Apply for graduation if defense is scheduled for spring and review and follow [Important Graduate College Deadlines](#).
- By March 1 – submit Annual Review form.
- Schedule defense of dissertation.
- Submit draft of dissertation to Graduate College for format review.
- Defend and after defense, submit required forms indicating approval/passing and all required electronic copies of the dissertation. Update POS.

***Important Milestones in the Doctoral Plan of Study
(entering with a bachelor's degree)***

FIRST YEAR

FALL

- Attend Fall Welcome activities, Camp T, and graduate forums.
- Meet with faculty mentor/advisor: discuss POS and program goals.
- Focus on successfully completing SOS 510 and SOS 511.
- Attend funding workshops and investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.
- Seek and plan professional and academic development experiences: conferences, workshops, and publication opportunities to disseminate original research.

SPRING

- Attend welcome back event and graduate forums.
- Meet with faculty mentor/advisor: continue discussing POS and program goals as well as selecting a chair.
- Attend a POS workshop and use check sheet to create a draft POS.
- By March 1 – submit Annual Review/Request for Funding form.
- Seek out summer internship/research opportunities; organize summer thesis research plans.
- Investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.

SECOND YEAR

FALL

- Attend Fall Welcome activities, Camp T and graduate forums.
- Meet with faculty mentor/advisor: continue discussing POS and program goals as well as selecting a chair.
- Attend a POS workshop and use check sheet to create a draft POS.
- By September 1 – identify supervisory committee chair/co-chair and submit POS with the chair's approval.
- By end of semester – be thinking about supervisory committee and have a working dissertation title.
- Investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.
- Seek and plan professional and academic development experiences: conferences, workshops, and publication opportunities to disseminate original research.

SPRING

- Attend welcome back event and graduate forums.
- Meet with faculty mentor/advisor: continue discussing POS and program goals as well as forming a supervisory committee.
- By March 1 – have an approved supervisory committee and submit Annual Review/Request for Funding form.
- MIP: submit portfolio and complete requirements.
- Seek out summer internship/research opportunities; organize summer thesis research plans.

THIRD YEAR

FALL

- Attend Fall Welcome activities, Camp T, and graduate forums.
- Meet with faculty mentor/advisor: continue discussing POS, program goals, and working dissertation title.
- Investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.
- Seek and plan professional and academic development experiences: conferences, workshops, and publication opportunities to disseminate original research.

SPRING

- Attend welcome back event and graduate forums.
- Meet with supervisory committee to discuss comprehensive exam and dissertation prospectus expectations.
- Compile a bibliography and send it to the supervisory committee in preparation for the comprehensive exam.
- By March 1 – update POS and submit Annual Review/Request for Funding form.
- Seek out summer internship/research opportunities; organize summer thesis research plans.

FOURTH YEAR

FALL

- Attend Fall Welcome activities, Camp T, and graduate forums.
- Coursework should be complete.
- Meet with supervisory committee to discuss dates and plans for comprehensive exam and dissertation prospectus.
- Pass comprehensive exam.
- Successfully defend dissertation prospectus.
- Advance to candidacy.
- Meet with Graduate Coordinator to review updates to check sheet and POS.
- Investigate and apply for grant, fellowship, and funding opportunities outside of the School and ASU.
- Seek and plan professional and academic development experiences: conferences, workshops, and publication opportunities to disseminate original research.

SPRING

- Attend welcome back event and graduate forums.
- Meet with supervisory committee very early in the semester to discuss dissertation progress and agree on a goal for the defense date.
- By February 15 – Apply for graduation if defense is scheduled for spring and review and follow [Important Graduate College Deadlines](#).
- By March 1 – submit Annual Review form.
- Schedule defense of dissertation.
- Submit draft of dissertation to Graduate College for format review.
- Defend and after defense, submit required forms indicating approval/passing and all required electronic copies of the dissertation. Update POS.

Satisfactory Academic Progress Policy

Academic excellence is expected of students doing graduate work. Failure to adhere to the policies below may result in academic probation or a recommendation to the Graduate College for withdrawal from the degree program.

The following policies pertain to doctoral and master's programs:

- Minimum GPA: To be eligible for a degree, a graduate student must achieve a grade-point average of 3.25 or better in all courses numbered 500 and above, and in all work specifically included in the Plan of Study. Two different grade-point averages are computed: 1) the overall graduate grade-point average in all courses numbered 500 or higher that appear on the transcript, and 2) the grade-point average in all courses that appear on the Plan of Study. Students must also maintain a grade-point average of 3.00 or better in all post-baccalaureate courses at ASU.
- Incomplete Grades: Incompletes are given at the discretion of the instructor of a course and should not be expected. Students granted an incomplete should complete a contract with the instructor outlining the work required and the timeline for completion. The timeline cannot exceed one calendar year. Once coursework has been fulfilled, a grade will be assigned. If the student does not complete coursework within the period stipulated by the instructor, the student may receive an unsatisfactory or failing grade for the course. In the case that the professor gives the student the full calendar year within which to complete the course, and the course is not complete within that time, the incomplete will become permanent and the student will have to re-take the course if it is a required course. The School of Sustainability permits only two incompletes on a student's transcript at any time.
- Individual Course Grades: A grade of C is not allowed on any courses within a student's Plan of Study. If a student receives a C, he or she must re-take the course or seek approval from the Graduate Committee to remove the course from the Plan of Study.

The following policies pertain to the master's programs only:

- Time Limit for Submitting a Proposal for the Thesis or Applied Project/Product: Master's students should submit their thesis or applied project or product proposal before the start of their third semester, but no later than one full semester before the thesis defense.
- Time Limit for Completing the Master's Degree: Students should take no more than three years to complete the master's program.

The following policies pertain to the doctoral program only:

- Time Limit for Passing Comprehensive Exam: Students should take the comprehensive exam within one year of finishing their coursework.
- Retaking the Comprehensive Exam: Students must petition the Graduate College to retake the comprehensive exam, and reexamination must occur no sooner

than three months and no later than one year from the original exam date. Only one reexamination will be approved.

- Time Limit for Defending the Dissertation Prospectus: Ph.D. students should defend the dissertation prospectus within six months of passing the comprehensive exam.
- Time Limit for Completing the Doctoral Degree: Doctoral students are expected to meet the School of Sustainability program milestones. Failure to do so may result in probation (see below). The Graduate College requires doctoral students to complete all program requirements within a ten-year period. The ten-year period starts with initial enrollment in the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years of passing the comprehensive examinations. The defense of the dissertation must take place at least 6 months after the student is advanced to candidacy.

Grades

The final passing grade for Research (SOS 592, 792), Thesis (SOS 599), Applied Project (SOS 592), Practicum (SOS 580), Reading and Conference (SOS 590, 790), and Dissertation (SOS 799) is Y (satisfactory). No grade (Z or Y) is given for continuing registration (SOS 595, 795). Reading and Conference (SOS 590, 790) may be taken for a letter grade if approved by the instructor.

Performance and Annual Review

To ensure that students complete their degrees in a timely manner, get the most out of their experience at SOS, and meet requirements of the degree and School, the Graduate Committee will review student progress annually. Students who are not making satisfactory progress may be dismissed from the program, according to university regulations.

Annual Review

Annual reviews will be conducted in March of each year. The Graduate Committee and the student's faculty advisor will review the following documents when assessing students' progress:

- Check Sheet (provided by the graduate coordinator)
- Transcript (provided by the graduate coordinator)
- Comments (provided by SOS faculty)
- Updated CV or resume (provided by the student by March 1st)
- Completed Annual Review Survey (provided by the student by March 1st)

The student's faculty advisor will provide to each student, in writing, the results of the annual review.

Probation Policy

A student may be placed on academic probation if:

1. The student's GPA in all courses numbered 500 and above and in all work specifically included in the Plan of Study falls below a 3.25;
2. The student's overall GPA for all post-baccalaureate courses taken at ASU falls below 3.00;
3. The student receives a C, D, or E, in a course on their Plan of Study; or
4. The student fails to complete the program within specified time guidelines and does not meet milestones specified in the graduate handbook.

Students will be notified by mail when first placed on probation and will be required to complete a Probation Agreement with their faculty advisor or the Graduate Committee. Students on probation must meet monthly with their faculty advisor or the Graduate Committee member handling their probation agreement to ensure satisfactory progression. A student placed on probation will remain on probation until performance improves and requirements have been met. Students have one semester to advance to good standing before termination is considered. The Graduate Committee will notify the student in writing when he or she advances to good standing.

A student may be recommended for withdrawal from the graduate program if:

1. The student is on academic probation because his or her GPA has fallen below 3.25 in the approved Plan of Study or 3.00 for all post-baccalaureate courses taken at ASU, and the student fails to bring the GPA to required levels by the time the next nine credit hours are completed (continuing registration, research, and thesis/dissertation hours cannot be included in these nine hours);

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2. The student receives a C or lower grade while on academic probation for any reason;
 3. The student fails to meet milestones specified in the graduate handbook; or
 4. The student fails to meet conditions stipulated in their Probation Agreement.

Students will be notified by mail if they are being recommended for withdrawal from the program.

A student may appeal any action concerning academic probation and withdrawal by petitioning the Graduate Committee within 10 business days, using the petition form found on the Graduate Community Blackboard site. Approval of petitions is not guaranteed.

Application for Graduation

Students should apply for graduation during the semester of planned graduation and no later than the date specified in the most current version of the Graduate College's [Graduation Deadlines and Procedures](#).

The Graduate Application for Graduation is through [myASU](#). Additional instructions on applying for [graduation](#) are online.

Tuition and Fees

Students can find information on [tuition and fees](#) online. Currently, the School of Sustainability does not have a program fee for the M.A., M.S., or Ph.D. in Sustainability, and uses general graduate tuition and fee rates for courses with the SOS prefix.

Financial Support

Students seeking financial support should ask the graduate coordinator and faculty advisor about available research and teaching assistant opportunities. SOS will assist students in seeking financial support opportunities, but admittance into and continuation within the program is not a guarantee of funding.

Students should also visit the Graduate College's web site, the SOS Graduate Community blackboard site, and other links for student funding resources:

- [The ASU Division of Graduate Studies Financial Support Office](#)
- [National Science Foundation Graduate Research Fellowship Program](#)
- [Jacob Javits Fellowships](#)
- [U.S. EPA National Center for Environmental Research – STAR \(Science to Achieve Results\) Fellowship for Graduate Environmental Study](#)
- [National Institutes of Health Grants](#)
- [National Research Service Award \(NRSA\) Research Training Grants and Fellowships](#)
- [Cornell University Graduate School Fellowship Database](#)
- [Michigan State Information Page on Graduate Scholarships, Fellowships, and Loans](#)
- [Federal Student Aid \(Student Loans\)](#)
- [Working at ASU](#)

Facilities

ASU has a large and diverse graduate student body. More than 12,000 students from 140 countries choose ASU to pursue their graduate degrees. The university has excellent library and laboratory facilities, as well as outstanding computing infrastructure, all of which foster a stimulating and supportive environment for graduate education and research.

The School of Sustainability is located in [Wrigley Hall \(WGHL\)](#). Of particular interest to graduate students is the second-floor Synthesis Center, which is available to provide individual and collaborative work space to students in the SOS graduate program. There is wireless access throughout the building and a data lab with computers and printers on the second floor that is available to SOS graduate students.

Access

Graduate students who have been admitted may request 24-hour access to the second and third floors.

Reserving Conference Rooms

Graduate students may reserve the second floor conference room (WGHL 211). Reservation requests should be made to the fourth-floor receptionist.

Locker Policy

Lockers are available in the Synthesis Center on a first come, first served basis. Students will need to bring their own locks and if they are using a locker on a regular basis, they should let the graduate coordinator know which locker number they are using.

Writing Help for Graduate Students

Kathryn Kyle, the School's writing instructor and tutor, helps graduate students improve their writing skills. Individual tutoring is available M-F by appointment, and a one-credit writing seminar is offered each semester. For appointments, please email Kathryn at kkyle@asu.edu or call her at 965-5704. Online writing resources are available in the graduate-student section of the SOS website.

SOS Travel Grants

The School of Sustainability supports limited SOS graduate student travel to support thesis/dissertation research and to attend sustainability-related conferences and other professional-development opportunities (workshops, seminars, lectures, expos, etc.). More information can be found on the travel-grant application on the SOS Graduate Student Community Blackboard site.

SOS Faculty

A list of [School of Sustainability faculty](#) and ASU [Sustainability Scientists and Scholars](#) can be found online.

SOS Students

A list of current [School of Sustainability students](#) can be found online.

University Contacts

	Area Code (480)
ASU Switchboard	965-9011
Bookstore	965-3191
Campus Health Services	965-3346
Career Services	965-2350
Counseling and Consultation	965-6146
Disability Resource Center (DRC)	965-1234
Graduate College – Admissions	965-6113
Graduate and Professional Student Association	727-9870
Graduation Office (Registrar)	965-3256
International Student Office	965-7451
Meal Plans	965-3463
Parking and Transit Services	965-6406
Public Events (Gammage)	965-5062
Records (Academic)	965-3124
Residency	965-7712
Residential Life	965-3515
Scholarship Office	965-4845
Student Accounts	965-6301
Student Employment	965-5186
Student Financial Assistance	965-3355
Student Recreation Complex	965-8900
Sun Card Office	965-2273
Sun Devil Ticket Office	727-0000
Testing Services, University	965-7146
University Technology Office	965-6500