Science Translation and Outreach (STO) Master of Science Program

Graduate Student Handbook

NOTE: Any information provided here will be superseded by the rules of the University of Kentucky Graduate School. Consult the Graduate School Bulletin and other documentation at < https://gradschool.uky.edu/> for the most recent information.

Revised March 2021

Contents

Letter to New Students

Dear Graduate Student:

Welcome to the online M.S. Program in Science Translation and Outreach (STO)! We are excited to welcome each and every one of you to our novel transdisciplinary degree program.

You may already appreciate the respect most Americans have for the institution of science, but many Americans are uncertain how to identify and capitalize on credible scientific knowledge for the public good. Our digital world overwhelms us with information, so much so that the public is often unable to discern scientifically valid information and, most importantly, to effectively use that information to improve lives. This is where the STO Program "fits."

Our sincere wish is that each of you has a positive, educationally enriching experience in your time in the STO Program. While the curriculum is challenging, we also hope you will communicate with us freely if there are ways we can support you in your studies and/or to improve the program for future students.

Sincerely,

Dr. Paul Vincelli

pvincell@uky.edu

859-218-0722

Extension Professor and STO Director of Graduate Studies

Introduction

This handbook is a guide to the major rules and procedures of the Graduate School and the University of Kentucky (U.K.) College of Agriculture, Food and Environment's Science Translation and Outreach (STO) Program. Its contents reflect the current understanding of the Director of Graduate Studies (DGS) and program faculty. However, rules can change. ***It is the responsibility of each student to be familiar with and follow the rules of the Graduate School and your academic program. The Graduate School will not waive regulations or grant exceptions if a student is unaware of the rule, even if the information was not presented to the student by program representatives or other authorities.*** Graduate School rules and policies are described in more detail in the most recent Graduate School Bulletin: https://gradschool.uky.edu/sites/gradschool.uky.edu/files/Bulletin/2020-2021/GraduateBulletinPart1_2020-2021_110620.pdf. University regulations are contained in the U.K. Administrative Regulations and Governing Regulations, located at: http://www.uky.edu/regs/.

Administration

Graduate Faculty

The UK Graduate Faculty consists of the Dean of the UK Graduate School and all persons appointed thereto by the University President. Full Members of the Graduate Faculty can serve on Master's committees, and direct Master's theses. Associate Members of the Graduate Faculty can also serve on Master's committees and direct Master's theses. If you have identified a UK faculty member willing to serve on your Advisory Committee but who is not a member of the UK Graduate Faculty, contact the DGS of the Program in Science Translation and Outreach (STO).

The DGS can petition the Graduate School to have faculty at other universities appointed as Adjunct Members of the UK Graduate Faculty so that they can serve on Advisory Committees. If interested in this option, contact the STO DGS.

Dean of the Graduate School

The Dean of the Graduate School is charged with the administration of the policies adopted by the Graduate Faculty and the University Senate relating to graduate studies.

Director of Graduate Studies (DGS)

For each graduate program, the Dean of the Graduate School appoints a DGS after nomination and approval by vote of the program Faculty of Record. The DGS administers the rules of the Graduate School as they pertain to the graduate program and serves as a liaison between the Graduate Dean and the faculty and students of the program.

Principal Advisor and Advisory Committee: M.S.

Each M.S. student's program is guided by a Principal Advisor and an Advisory Committee. The M.S. Advisory Committee consists of the Principal Advisor as chair, and at least two other members. At least two committee members (including the chair or a co-chair) must be members of the Graduate Faculty, and at least one of these must be a Full member. ***The committee should be chosen and submitted to the DGS for approval before the end of the second semester of the student's tenure for the M.S. degree***. The Advisory Committee should meet (virtually or in-person) at least once a year with the student. It is the responsibility of the student to schedule these meetings. A written record of each meeting of the student and their advisory committee, signed by the student and by the Principal Advisor, must be provided to the DGS by the Principal Advisor within two weeks after the meeting, and a copy will be placed in the student's file. No less than two weeks prior to the Final Oral Examination, the DGS will recommend to the Dean of the Graduate School the appointment of the Advisory Committee to serve as the Examination Committee.

Program Coordinator

Along with the STO Program DGS, the STO Program Coordinator serves as one of the key faces of the program to enrolled and prospective graduate students. Program Coordinator responsibilities include serving as a primary contact for student inquiries on administrative issues, correspondence related to admission, advisory committee formation and documentation, and general student needs. The Program Coordinator will regularly share STO Program communications with students and concerned stakeholders across campus and beyond.

Requirements for Degrees (Curriculum)

Online M.S. in Science Translation and Outreach (STO) in Agriculture, Food and Environment
Curriculum 2 Feb 2021

Program Description

A transdisciplinary program that builds student capacity to identify credible scientific information and incorporate that into programs relevant to issues of public concern. Applications of these skills will occur in potentially any issue relating to agriculture, food and environment. This is a non-thesis program of study.

Student Learning Objectives
1. Engage with diverse audiences and explore information sources to ascertain issues of concern relating to agriculture, food and environment and their transdisciplinary relationships
2. Locate, identify and evaluate the credibility of relevant scientific information in agriculture, food and environment, and distinguish it from non-scientific information
3. Develop and assess evidence-based outreach programs that focus on issues of public concern in agriculture, food and environment

Core Courses (12 credits, required)

Program Development and Evaluation (STO 601 [CLD/SOC 665], 3 cr). The purpose of this course is to provide a basic understanding of program evaluation processes, concepts, and theories and to develop expertise needed to design and conduct systematic evaluations of formal and non-formal programs. The material to be covered is applicable to a wide range of topics and disciplines, including social welfare, youth development, family studies, agriculture and the environment, community/economic development, and other formal and non-formal educational programs. Such programs have a common goal of achieving their desired objectives and being held accountable for the resources they obtain from agencies and stakeholders.

Because program evaluation is part of a larger interdisciplinary content area that includes research design and methods, the course will briefly cover needs assessment and asset building, with program development also being a necessary component. The majority of the course will focus on evaluation design, methods, and implementation. A range of program evaluation and research methods will be presented, and students will be encouraged to identify those approaches that most closely match their own philosophical perspectives, as well as strategies that will be utilized by their groups, organizations and current/future employers. Students will participate in class discussions and activities, reflecting on any experience working with community programs when applicable. Web-based publications, journal articles and the assigned text readings will comprise the content of the course.

Science Literacy and Translation (STO 602, 3 cr). Students will explore, translate, and interpret scientific findings into application and policy, enhance their scientific literacy, and learn to evaluate the credibility of sources of scientific information, principally by:
- Examining scientific methodologies including its potential and limitations
- Practicing critical and reflective thinking on relevant scientific issues

- Reviewing scientific literature and evaluating its merits
- Designing an original, evidence - based learning module of a public interest issue

Research Methods (STO 603, 3 cr). This course provides students with foundational knowledge for scientific inquiry and the use of research to inform evidence-based practice. It covers fundamentals of understanding, analyzing, and critiquing research, through an exposure to science philosophy and techniques used to conduct scientific investigations. It covers aspects of the research process from developing a research question to writing the research report. Students will be introduced to qualitative and quantitative research design, methodology, and ethical issues associated with conducting and evaluating research.

Capstone in Science Translation (STO 650, 3 cr).
Students in this course use principles of science translation and outreach to (1) Identify an issue of public concern; (2) Design an original, evidence-based outreach program to address the concern; (3) Create a program implementation plan; and (4) Develop an evaluation plan for the program.

Types of Capstone Projects
1. **A mini-research model** (hypothesis-testing), in which the student translates current scientific information into an applied research question. Such projects must have a grounding in the peer-reviewed literature. Students should be aware that circumstances may impede the completion of such projects during the semester the capstone course is taken. Consult in advance with your Advisory Committee and the DGS concerning this. Project is grounded in peer-reviewed literature.
2. **Translation of scientific content into outreach for selected audience(s)**, in an area somewhat unfamiliar to the student. These may result in typical Extension programming: publication, radio, web site, multimedia. Such projects must have a grounding in peer-reviewed literature. Furthermore, the student's report must reflect that academic grounding.

Elective Courses (18 credits)
In consultation with their advisory committee and subject to approval of the Director of Graduate Studies, students will develop individualized programs of study totaling at least 18 credit hours of elective courses. Electives may be chosen from any academic unit in the College of Agriculture, Food and Environment, including AEC, AFS, BAE, CLD, DHN, ENT, FAM, FOR, PLS, PPA, and RTM. Elective courses from other UK colleges may be considered with the approval of a student's advisory committee and the STO DGS. Courses at the 600 level, 500 level, and 400G level will be acceptable, subject to the following conditions:
- Advisory Committee/DGS approval
- The program of study is constituted of no more than 15 credit-hours of 400G-level plus 500-level courses.

While the core curriculum provides learning appropriate to the practice of science translation, elective courses serve several purposes: (1) To allow students to gain deeper knowledge in the disciplinary area of their undergraduate degree; and (2) To gain broader, transdisciplinary exposure to less familiar science content, expanding their capacity to translate science content to lay audiences. STO students are encouraged to take at least two electives outside one's area of specialization. Advisory committees will have the responsibility to ensure that students enroll in electives of both types. Such flexibility reflects

the great diversity of programmatic challenges our students will encounter over their careers, particularly Extension agents.

Other Requirements

The student Advisory Committee should be chosen and submitted to the DGS for approval before the end of the second semester of the student's tenure for the M.S. degree.[1] Completion of program requirements include passing a final online oral Exit Exam administered by the student's graduate committee. Content of the final oral exam will include an oral report on the student's capstone project and may include questions on general curriculum content from core courses and/or elective courses.

Admission

Admission will be based on procedures described in the current Graduate School Bulletin.

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[1] As per the UK Graduate Bulletin, "the examining committee consists of at least three qualified faculty members recommended by the Director of Graduate Studies and appointed by the Dean of the Graduate School. At least two committee members (including the chair or co-chair) must be members of the Graduate Faculty, and at least one of the two must be a Full member of the Graduate Faculty." Students will have considerable flexibility in selecting additional members of their advisory committee, providing individuals selected have some relevance to the student's professional interests and needs. Additional members of the advisory committee may include community partners in the public sector but outside academia, in the private sector, or in government. All committee members are subject to the approval of the DGS.

Graduate School Requirements - Master of Science

Time Limits: The limit is 6 years to complete all requirements, with the possibility of extensions approved by the Graduate School for an additional 4 years.

Coursework: For a M.S. degree, the Graduate School has the following minimum course requirements:

1. 30 total semester hours of graduate course work, with a GPA of at least 3.0. Courses that count toward fulfillment of this requirement are those with numbers from 500 to 799, and all 400-level courses with a G suffix that are outside the student's major.
2. 18 hours of graduate course work in elective courses
3. 12 hours of graduate course work in the student's major area core courses (STO).
4. 15 hours in 600 or 700 level courses.

Note: The minimum grade a student can earn in a course and receive credit towards their degree is a "C".

Application and Admission

The Graduate School's requirements for admission are outlined in the Graduate School Bulletin (https://gradschool.uky.edu/sites/gradschool.uky.edu/files/Bulletin/2020-2021/GraduateBulletinPart1_2020-2021_110620.pdf). They include a baccalaureate degree from an accredited institution, and a minimum grade-point average (GPA) of 2.75 on a 4.0 scale for all undergraduate work, and 3.0 on a 4.0 scale for all graduate work. Applicants whose native language is not English must have a minimum score of 550 (paper), 213 (computer), or 79 (internet) on the Test of English as a Foreign Language (TOEFL), or an IELTS score of 6.5 or better. These are the *minimum* requirements for acceptance into any graduate program at U.K.

Application materials must be provided as per the instructions of the Graduate School through the ApplyYourself application portal at:
https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=ukgrad

The following items will be required by the Graduate School and the STO Program as part of the application:

- Official transcripts from undergraduate and previous graduate studies
- Letters of recommendation (3)
- Personal statement describing your background and interest in the program
- Professional Resume
- Application Fee ($75)[1]

Except in rare circumstances, the STO Program in unable to offer financial support for graduate studies.

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[1] Check with the STO Program Coordinator in case you are eligible for fee waiver)

Leave of Absence Policy

Enrolled graduate students at the University of Kentucky who sit out for one or more semesters will need to complete a new application and pay the application fee to be considered for readmission. In many instances this requirement can be avoided by requesting a "leave of absence." In addition to avoiding the application process, this status will allow the student to priority-register in preparation for their return to UK. Procedurally, students should contact the Director of Graduate Studies (DGS) to seek approval for the leave prior to the beginning of the semester in question. If approved, the DGS will contact the Graduate School admissions officer who will modify the record accordingly. No more than two consecutive and four total semesters in leave of absence status may be requested. International students considering a leave of absence are strongly encouraged to discuss their plans with the International Center, Department of Immigration Services prior to making a formal request.

Enrollment Requirements

Each student must have her/his schedule approved by her/his Principal Advisor and the DGS before registering each semester. It is strongly recommended that students and their Principal Advisors consult with the DGS regarding scheduling of coursework, to avoid problems later. Courses to be added or dropped also must be approved by the DGS and/or by the Principal Advisors. It is the student's responsibility to register for courses via their myUK accounts each semester. Students MUST maintain continuous enrollment to remain in good standing with the Graduate School. A student who allows their enrollment to lapse for one semester will no longer be a student in good standing and must apply to the Graduate School and to the STO Program to be readmitted. Because international students are required by the U.S. Immigration Service to be enrolled for 9 credit hours in the spring and fall semesters, failure of international students to enroll could result in other serious consequences, up to and including deportation.

Annual Review of Progress and Termination of Program Participation

It is each student's responsibility to arrange a meeting with his/her Principal Advisor and Advisory Committee at least once a year to formally evaluate academic progress. This evaluation will be conveyed in writing from the Principal Advisor to the student, and a copy will be signed by the DGS and placed in the student's file. The Annual Review of Progress should be conducted with the student's advisory committee at an annually scheduled virtual meeting to be scheduled at the end of each Spring semester.

The form to be used to record the Annual Review of Progress of Graduate Students for the STO Program can be accessed and downloaded at the following url:

https://drive.google.com/file/d/1HQ-HFMr1RnPzUta1i1LREoH_6G2XZ6C6/view?usp=sharing

A copy of the form can alternatively be made available by contacting the STO Program Coordinator or the DGS.

The student should complete all sections indicated as "to be completed by student." The Principal Advisor or DGS should complete the section indicated as "to be completed by Principal Advisor." A completed annual review of progress form will be due on or before June 30th of each calendar year. If a student is graduating in the spring, they may forgo a final annual review of progress form submission.

A student will be considered to be making good progress if they maintain a grade of at least a B in all graduate courses.

Students will be placed on academic probation because of failure to meet the minimum overall 3.0 GPA required by the Graduate School. "Scholastic Probation" and "Termination" are specifically detailed on pages 41 and 42 of the Graduate School Bulletin: https://gradschool.uky.edu/sites/gradschool.uky.edu/files/Bulletin/2020-2021/GraduateBulletinPart1_2020-2021_110620.pdf

Responsibilities of the Graduate Program

The Director of Graduate Studies is the chief executive for the Principal Advisor, the advisory committee and the student. He/she serves as an ex-officio member of all committees and may advise any committee member, the Principal Advisor, or the student regarding student performance.

Responsibilities of the Principal Advisor
The Principal Advisor provides advice throughout the student's graduate program. The method and philosophy of developing and carrying out a graduate program should rest with the Principal Advisor in consultation with the advisory committee. The Principal Advisor should approve all course work and review the progress of the student regularly. Commonly the Principal Advisor will share some degree of common academic interest with the student. However, the Principal Advisor need not have expertise in the student's capstone project. In such cases:

1. Rather than providing disciplinary knowledge, the role of the Principal Advisor may be to provide expertise in science translation in all its forms, breadth of knowledge, critical thinking skills, broadmindedness, and their knowledge or experience of the interface between scientific knowledge (natural sciences and/or social sciences) and societal challenges.
2. Some degree of expertise can be provided by one or more associate members of the student's committee; and/or,
3. An auxiliary (non-voting) member may provide expertise that can assist the student.

Responsibilities of the Advisory Committee
Members of the advisory committee are an advisory board to both the Principal Advisor and to the graduate student. Supervision of the performance of the student is the responsibility of the Principal Advisor, but members of this committee may suggest course work or ideas that will promote success of the student's program. A member of the advisory committee may serve to advise the student in a special area of expertise and can coordinate portions of the student's capstone project in agreement with the Principal Advisor.

Responsibilities of the Graduate Student

The program philosophy is that commitment and dedication, as well as curiosity, are essential characteristics of graduate studies and that successful graduate study demands evening and weekend work.

It is the responsibility of each graduate student to comply with regulations governing the University of Kentucky and the graduate program as outlined in the Graduate School Bulletin at: https://gradschool.uky.edu/sites/gradschool.uky.edu/files/Bulletin/2020-2021/GraduateBulletinPart1_2020-2021_110620.pdf. Details related to transfer of graduate credits are also detailed in the UK Graduate School Bulletin.

Important deadlines can be met only if the student is familiar with criteria in the bulletin and with notifications that are published periodically, particularly during registration procedures.

Forming a Graduate Advisory Committee in the M.S. Program in Science Translation and Outreach (STO)

Important: It is the student's responsibility to form your Advisory Committee. Please pay close attention to the guidance provided here. *Students should identify a Principal Advisor by the end of their first semester and the full Advisory Committee by the end of the second semester. The STO Program Coordinator and the STO DGS can be helpful in identifying suitable advisors. Once committee members have agreed to serve, contact the Director of Graduate Studies.*

Advisory Committee Requirements
- The advisory committee must consist of a minimum of three faculty members.[2]
- At least two committee members (including the chair or co-chair) must be members of the STO graduate faculty; and at least one of these must be a Full Member of the STO graduate faculty.
- Once committee members have agreed to serve, the committee members are recommended to the Graduate School by the Director of Graduate Studies using the *Final Masters Degree Examination* form.
- Questions regarding the eligibility of individuals without graduate faculty status to serve on masters committees should be directed to the Assistant Dean for Graduate Academic Services.

Action Items for the Student
1. Make sure you have the following documents, to distribute to potential advisory members. Much of what they need to know is in these documents:
   a) *STO Advisory Committees: Opportunities and Responsibilities*
   b) Online M.S. in Science Translation and Outreach (STO) in Agriculture, Food and Environment, Curriculum
2. Review the Excel file named *Faculty List with Graduate Faculty Status*. Anyone on this list can serve as a Principal Advisor or an Associate Advisor. The only thing necessary is for them to

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[2] One advisory member may be from a college other than the UK College of Agriculture, Food and Environment, including from an institution of higher education other than UK. If from outside UK, special paperwork must be completed and signed, so do not delay if this is your preferred option.

apply to the UK Graduate School for membership in the STO Graduate Faculty. They should contact the Director of Graduate Studies for guidance on this application.

3. The student must identify the following:
    a) A Principal Advisory Member
    b) Two Associate Advisory Members
    c) All Advisory members must be faculty members. At least two must be members of the STO graduate faculty. At least one must be a Full member of the Graduate Faculty.
    d) Optional: One or more Auxiliary Advisors (non-voting, recruited for particular subject-matter knowledge)

To the Program

The Science Translation and Outreach Program considers it the obligation of the graduate student, and not of the Principal Advisor, to initiate all actions required for fulfilling the requirements for the degree.

Problems that arise should be discussed first with your Principal Advisor. If your Principal Advisor cannot address a problem, you may wish to consult with the DGS.

As a graduate student involved in academic studies, you may sometimes be responsible for negotiating with other institutions, industries, or private individuals in relation to funds, supplies, or services. Your communications with such individuals should be conducted with full understanding of University and program policies and regulations.

To the Advisory Committee

The student's advisory committee serves both as an advisory board for his/her graduate program and, to the extent possible, as a source of information relating to student capstone projects. The student should seek the help of any member of the committee whenever it becomes desirable during the course of study. Any major changes in the course work or research will be done in consultation with the committee members.

Impediments to Capstone Projects for Students

A major strength of our program is that students may select a capstone project of direct interest to them, and possibly to their stakeholders. This contrasts with M.S. thesis projects, which are often chosen by the student's major professor. The capstone project is a central integrative component of the STO curriculum.

Experience in the classroom indicates that the STO Program needs to be flexible enough to accommodate the work of dedicated students whose capstone projects unexpectedly encounter significant impediments which are out of their control. Presently, three types of impediments may present themselves:
1. **Complications and restrictions relating to COVID-19.** Several of our previous students in STO 650 encountered insurmountable problems due to COVID-19. These problems affected the timely implementation of their well-crafted capstone plans.
2. **Time constraints relating to project approval by the Institutional Review Board (IRB)**. IRB approval is essential when working with human subjects, in order to protect their safety and rights. In some cases, the processes required to seek IRB approval in order to execute their capstone project, may understandably take months.
3. **Circumstances**. Research projects can be impeded, often substantially, by unexpected circumstances. The same is true for capstone projects.

The STO degree is a Plan B, non-thesis degree, so we must guard against expectations that capstone projects should approximate those of a thesis degree. The only time formally allotted to the capstone project is the capstone course itself, so ***the STO Program strives to maintain realistic and fair expectations for what constitutes completion of the capstone project during a student's tenure in the program***.

Guidance for Students and Advisory Committees
1. The written guidelines in the document *Description of Capstone Project* remain valid.
2. Even (and especially) for an incomplete project, the final report must make clear the following:
   - A well-defended[3] public need, with a description of how this was determined.
   - A well-defended proposed outreach program (and/or proposal for applied research, at the discretion of the advisory committee).
   - A well-conceived plan for evaluating the program.
3. The capstone report should include at least a short paragraph on ethical considerations relating to the project. The web site https://www.uky.edu/legal/ethical-principles-and-code-conduct may be helpful. Dr. Vincelli will provide other resources upon request.

4. Most items in this numbered list and in the attachment can be described and discussed at least partially in the absence of original, independent project data, and can therefore serve as a valuable learning experience. There is precedence for such an approach [1]. Students are

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[3] "Well-defended" means that credible sources of information, particularly expert-reviewed information, buttress the statements made. Managing citations using Endnote is recommended.

encouraged to communicate regularly with their Advisory Committee and, as desired, with the instructor of STO 650, to resolve any uncertainties.

Literature Cited

1. R. L. Hirsch, A. K., What to Do When the Lab Closes? Managing an Interdisciplinary Undergraduate Research Capstone Course During a Global Pandemic. *Experiential Learning & Teaching in Higher Education*, **2020**, Vol. 3. Available from: https://nsuworks.nova.edu/elthe/vol3/iss1/7

STO Advisory Committees: Opportunities and Responsibilities

An Appeal to Colleagues
Service on Advisory Committees of the Science Translation and Outreach (STO) Program is expected to:
- Require limited commitment
- Contribute to the education of our colleagues in Extension
- Result in creative, interesting, individualized curricula and—most especially—exciting capstone projects

The STO Programs hopes you will try serving on one or more STO Advisory Committees.

The STO Program
Most Americans respect the institution of science but are uncertain how to capitalize on scientific knowledge for the public good. Our digital world overwhelms us with information, so much so that the public is often unable to discern scientifically valid information and, most importantly, to effectively use that information to improve lives. The Science Translation and Outreach (STO) Program advances students' capacity to develop locally relevant, transdisciplinary programming based on credible scientific findings. The STO Program builds student capacity to:

1. Assess public needs and interests with respect to agriculture, food, and environment
2. Identify, sort, and interpret credible scientific information from diverse fields relevant to public concerns
3. Use scientific information to create successful programs in applied research and outreach which effectively address public concerns.

This creative, transdisciplinary program, homed in the College of Agriculture, Food and Environment, requires 12 credits (four 3-credit courses) of core material and 18 credits of free elective courses approved by the student's advisory committee.

Learning Approach
Students in the STO M.S. program will develop individualized programs of study totaling at least 18 credit hours of elective courses, in consultation with their Advisory Committee and subject to approval of the Director of Graduate Studies (DGS) of the STO program. While the core curriculum provides learning appropriate to the practice of science translation and outreach, elective courses allow students to:
(1) Develop deeper learning experiences in disciplinary areas of their undergraduate degree and/or professional experience; and,
(2) Gain broader, transdisciplinary exposure to less familiar subject-matter content, expanding their capacity to translate science content to lay audiences.

Such flexibility reflects the great diversity of programmatic challenges our students will encounter over their careers. Elective courses commonly will be selected from offerings of the College of Agriculture, Food and Environment. However, students are welcome to consider online courses offered by other UK colleges.

Committee Composition

Advisory Committees will consist of at least three faculty members: a Principal Advisor and two Associate Advisors (see roles, below). Committees will be populated according to UK Graduate School rules. Committees may include one or more non-voting, Auxiliary Members.

Some Advisory Committee members will be asked to serve based on their subject-matter expertise. However, commonly, Advisory Committee members will be approached for their breadth of knowledge, their overall critical thinking skills, their broadmindedness, and their knowledge or experience of the interface between scientific knowledge (natural sciences and/or social sciences) and societal challenges.

Roles of Members of the STO Advisory Committee

Principal Advisor
- Serves as a voting faculty member of the committee
- <u>Course selection:</u> Assures that the student can adequately explain and defend course selection with respect to current or future professional interests or activities.
- <u>Capstone project (STO 650):</u> Provides, as appropriate, periodic advisement to the capstone project, based on subject-matter expertise or general knowledge of science translation. If the latter, one or more invited auxiliary members may provide periodic advisement based on subject-matter expertise.
- Leads the final, end-of-program oral exam.

Associate Advisor
- Serves as a voting faculty member of the committee
- <u>Course selection</u>: Assists in assuring that the student can adequately explain and defend course selection with respect to current or future professional interests or activities.
- <u>Capstone project</u>: Provides, as appropriate, feedback and advice on the capstone project. Such feedback and advice may be discipline-related or of a general nature with respect to science translation.
- Participates in final, end-of-program oral exam.

Auxiliary Advisor
- Serves as non-faculty, non-voting member of the committee.
- Subject to availability, interacts with student as needed to provide advisement in support of project activities.
- Participates in final, end-of-program oral exam (subject to availability).
- Although non-voting (as per rules of the UK Graduate School), auxiliary members of STO Advisory Committees are ***<u>essential</u>*** to the education of STO students. The STO Faculty recognizes the value our off-campus partners "bring to the table" in terms of critical knowledge, valuable experience, and cognitive skills. We express our most heartfelt thanks for the contributions of time and expertise provided to our STO students by our auxiliary partners.

Instructor of Capstone Course (STO 650)
- Interacts with, and advises, the student before and during enrollment in the capstone course.

- o Assures student accountability for completing assignments in STO 650.
- o Provides oversight re: completion of capstone project, including in-class oral presentation and submission and evaluation of written report.
- o Provides guidance to student in coordinating end-of-program oral exam.
- o May participate largely as an observer in some or all of the final, end-of-program oral exam.

Responsibilities of the STO Advisory Committee
Recurring Basis

1. Regarding course selections:
    a. The student must consult with Advisory Committee members about course selections at least twice annually. Most of those consultations may be via email but one meeting annually should be virtual and synchronous and include most or all committee members.
    b. The Advisory Committee will:
        i. Ensure that the student enrolls in electives of both disciplinary and extra-disciplinary subject matters.
        ii. Evaluate course selections based on the student's brief, coherent defense as to course selections, one that indicates the student has reasonably considered how each course selection may contribute to their current and future professional activities or goals.
        iii. Communicate clearly to students that their program of study must be constituted of no more than 15 credit-hours of 400G-level plus 500-level courses.
    c. The Principal Advisor will:
        i. Ensure that all course selections are approved by the Advisory Committee and that selections are communicated to the STO DGS for approval.
2. Advisory Committee members will inquire regularly about capstone projects, reminding students of the importance of thinking about the capstone project well in advance of enrolling in the capstone course. Advisory Committee members are welcome to encourage consideration of possible capstone projects or graduate-level, independent studies (eligible for credit as special-problems courses) that may contribute to their own program, with the proviso that the project idea has relevance to the student's local system(s) of interest and holds interest for the student.

End of Program
3. Advisory Committee members will participate in a final online, synchronous oral exam, which will focus on the capstone project and the overall learning of the student through the STO experience.

Concluding Points
To students: While there are certain guidelines that advisory committees must adhere to, you should feel welcome to advocate for Advisory Committee members that you believe will promote your learning and advance your capstone project.

To Advisory Committee Members: Service on STO Advisory Committees is expected to require considerably less time than for Plan A Master of Science degrees. However, the STO Program is interested in how the experience of serving on a STO Advisory Committee can be made as efficient and professionally rewarding as possible. Please share your ideas with the STO DGS, Dr. Paul Vincelli, at pvincell@uky.edu.

Science Translation and Outreach Program Graduate Student Representatives

In recognizing the unique challenges that online students face, the Science Translation and Outreach (STO) Program has implemented a Graduate Student Representative System. The STO Program Student Representative role is designed to serve as STO Program student body representation and as an additional point of contact for students in the program to bring confidential issues or general issues of concern to the STO Program Coordinator, the STO Director of Graduate Studies (DGS), or the STO Executive Subcommittee. In recognizing the value of open channels of communication for continuous feedback, the STO Program will invite STO Student representatives to all meetings where non-confidential/personnel related matters are discussed. We value the input of students and realize that it is ultimately their interests that the STO Program is designed to support and promote.

There will be three STO Program Student Representative positions available for STO students to self- or peer-nominate to fill. STO Program Student Representatives will serve one-year terms, with the potential for renewal, if no other new students desire to fill the incumbent representative's role. Priority will be given to rotate new students into the representative positions to promote a sense of fairness.

One of the three STO Program Graduate Student Representatives will be invited to serve as the STO Program's student representative to the UK Graduate Student Congress (GSC). That individual can be self- or peer-nominated and will also serve a one-year term that coincides with their term as a representative in the STO Program. Renewal of the role as STO Program representative to the GSC is possible if no other new students desire to fill the incumbent representative's role. Priority will be given to rotate new students into the representative positions to promote a sense of fairness.

STO Program Representative self- and peer-nominations will be requested at the beginning of each calendar year, as close as practicable to January first. If a STO Program Student Representative graduates from the program during the middle of their representative term, a special self-/peer-nomination STO Program Student Representative request will occur as soon as practicable and the newly chosen representative will complete the remainder of the graduating student representative's term.

Check List for Masters Degree Students

NOTE: The following is subject to change by the Graduate School, so consult the Graduate School Bulletin and other documentation on the Graduate School home page.

- ❑ Plan initial coursework. Before the first semester, meet via Zoom® with the DGS and/or your Principal Advisor, to determine courses to be taken during the first semester. Your Principal Advisor should be identified and recruited by the end of the first semester.
- ❑ Select Advisory Committee. An Advisory Committee should be selected before the end of the second semester.
- ❑ Plan program of study. By the end of the second semester, meet with the Advisory Committee to develop an overall course of study, including classes with a potential capstone project in mind.
- ❑ Complete coursework.
    - ❑ 30 hours minimum graduate credit (500-799 and 4xxG courses not in major).
    - ❑ 12 credit hours must be in STO core courses.
    - ❑ At least 15 credit hours must be at 600-700 level.
    - ❑ 18 credit hours must be in regular elective courses. Justifications of electives must be submitted to your Advisory Committee or the DGS for approval.
- ❑ Present a brief written academic report to the Advisory Committee at least once a year, as part of the Annual Review if Progress (discussed earlier in this Handbook). This should be conducted during the Spring semester of each academic year and an Annual Review of Progress form should be completed with Advisory Committee. Completed Annual Review of Progress form should be submitted to the DGS by June 30th of each year.
- ❑ Schedule your exit exam at least **three months in advance**.
- ❑ Apply for graduation within 30 days after the beginning of the semester of expected graduation (15 days in summer semester).

Final Semester Check Sheet for Master's Non-Thesis Students (Plan B)

❑ **Conduct a review of your transcript and Degree Audit if available for your program to ensure the following:**
- You have completed, or are in progress to complete, the required number of earned hours for the degree in your program of study.
- You do not have any missing or incomplete ("I") grades.
- Your GPA is 3.00 or higher.

❑ **Complete the** *Master's/Specialist Final Examination form*
- The Final Exit Examination must take place no later than eight days prior to the last day of classes of the semester in which you expect to graduate.
- Final Exit Examinations may not be scheduled during the period between semesters.
- Check the Graduate School Calendar http://gradschool.uky.edu/key-dates for semester deadlines for the scheduling of final examinations.
  - The Graduate School specifies that this signed form must be receive there a minimum of *two weeks prior to the intended examination date*, so be sure to submit it as far in advance as possible.
- Committee information
  - Your Advisory Committee will serve as your examining committee, which should consists of at least three qualified faculty members recommended by the Director of Graduate Studies and appointed by the Dean of the Graduate School.
  - At least two committee members (including the chair or co-chair) must be members of the STO Graduate Faculty, and at least one of the two must be a Full member of the STO Graduate Faculty.
  - Students should provide your written Capstone Project Report at least two weeks in advance of your final exam. Depending on the Committee's wishes, they may want an oral presentation of your project also. During your exam, questions from your committee may relate to your project, your coursework, or other topics committee members feel is professionally relevant to a graduate of the STO Program.

❑ **Apply for your degree**
- As your final semester approaches, students in the STO Program should apply for their degree. One way to apply is through your Degree Audit in the myUK Graduation Planning System (GPS). You can also apply through the Student Services tab in myUK. Go to myUK GPS web site (https://myuk.uky.edu/irj/portal). Click on Student Services / myRecords / Apply for Degree.

- Note date submitted
  - Due dates are based on the semester you intend to graduate and are as follows:
    1. May degree – April 1
    2. August degree – April 1
    3. December degree – November 1
  - If you submitted a degree application for a previous semester, but did not

graduate, you must complete a new degree application for the current semester.

STO Program System Map