

# School of Marine and Atmospheric Sciences Graduate Student Handbook 2024-2025







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# 1 Introduction

Welcome! You are about to start the next phase of your career in marine, atmospheric, sustainability, conservation science, or conservation policy. These are dynamic and exciting fields that will present new and interesting challenges for you. Stony Brook University's School of Marine and Atmospheric Sciences (SoMAS) is glad you have chosen to pursue your advanced studies with us, and we look forward to interacting with you for years to come.

SoMAS has more than 60 faculty members and 145 graduate students, each contributing uniquely to the diversity of our collective interests and experience. You will meet people studying everything from bacterial genetic sequences to fishery species populations and policies to global climate models to urban planning and design. We are all passionate about our work and you are encouraged to talk to students and faculty in fields other than your own – you would be surprised how often students discover an area of marine, sustainability, or atmospheric science they have never heard of before, yet that new area turns into their thesis, dissertation, capstone, or internship project.

Many of you will be making the initial transition from student to scientist during your SoMAS tenure. Unlike most undergraduate studies that focus on presenting you with new information, graduate studies actively involve applying your knowledge to problems and questions for which we do not already have answers. We are training you to be our scientific peers – former SoMAS students regularly collaborate with their advisors on new projects years after graduation.

Expectations of you and corresponding standards are high. Ours are demanding fields, and dedication and effort are prerequisites for success. The magnitude of the difference in expectations between undergraduate studies and graduate studies is comparable to the expectation difference between high school and college. You will need to work hard, but we have every confidence that you will succeed!

This handbook provides information essential to completing your career at SoMAS. The handbook's length might be initially daunting, but not every section applies to every student. In the following pages you will find information about various people and groups at SoMAS, degree requirements and recommended timelines, forms that must be submitted along the way, and general SoMAS policies. Please contact your counselor, Ginny Clancy our Graduate Program Coordinator; Ginny.clancy@stonybrook.edu, or the Graduate Programs Director (GPD) when you have questions. The GPD email address is: somas\_gpd@stonybrook.edu

Again, welcome, and let's get started!

# 2 People, Committees, Groups, and Organizations

There are a number of people and groups you will interact with during your career at SoMAS. You might not interact with all of these people and this is not an all-inclusive list, but below is a description of most of the key people and groups associated with your tenure at SoMAS.

# 2.1 <u>The List (in Alphabetical Order)</u>

Advisor: Your advisor is a member of the faculty chosen by each student in the SoMAS M.S. and Ph.D. programs (M. A. students, please see 'Coordinating Committee for the Marine Conservation and Policy (MCP) Program' paragraph below). Advisors guide research and oversee all efforts towards degree completion. Advisors are also concerned with you as a person, and along with other mentors you may find in your time here are ready to help solve non-academic difficulties. You may choose to have co-advisors, where two faculty members jointly guide your academic career. The choice of advisor is a critical one, and is perhaps the most important choice you will make as a graduate student. While most often your initial temporary advisor will become your permanent advisor, you must make this choice official by the end of your second semester – the arrangement is by the mutual consent of you and your potential advisor. You must complete the Advisor Declaration form (see Forms folders on your Orientation flash drive; SoMAS forms can also be found on the SoMAS web page) once an advisor has been found. If you choose to change your advisor at a later date, an Advisor Change form (see Forms folders on your Orientation flash drive; SoMAS forms can also be found on the SoMAS web page) must be submitted. You will not be allowed to register for your third semester without an official advisor except under exceptional circumstances.

Advisory Committee: Entering M.S. and Ph.D. students will work with an advisory committee consisting of your initial temporary advisor and at least one other faculty member-- to design a course plan fulfilling the curriculum requirements (see below) that not only prepares you for your expected graduate work but also for your next career step. This approach has the benefit of enhancing the personalized input you get from the very beginning of your graduate study at SoMAS, but also requires your active participation to provide what you need. Your Thesis (M.S.) or Dissertation Committee (Ph.D.) will take over the advisory role one they are established (see below).

*Center for Inclusive Education*: The CIE (<u>https://www.stonybrook.edu/commcms/cie/)</u> is a unit of the Stony Brook University Graduate School (see below) dedicated to bringing diverse perspectives into the broad range of research and scholarly activity done here. The CIE works to provide resources and community for anyone at SBU interested in diversity and inclusion.

*Coordinating Committee for the Marine Conservation and Policy (MCP) Program*: Students in the MCP program will be collectively advised by this committee. The committee consists of the MCP Faculty Director (currently Ellen Pikitch) and other faculty members with interest in marine conservation. Each new student will be assigned an interim mentor from the coordinating committee who, along with the MCP Faculty Director and MCP Assistant Director (Kaitlin Giglio), will help students design their curricula to best meet their interests, satisfy the requirements of the MCP program, and to help students find mentors for their capstone projects or internships.

*Division Director, Atmospheric Sciences*: The current Director of Atmospheric Sciences is Brian Colle.

Division Director, Marine Sciences: The current Director of Marine Sciences is Gordon Taylor.

Division Director, Sustainability: The current Director of Sustainability is Donovan Finn.

*Educational Programs Office*: This office maintains student records and provides support for almost all student activities. In addition to records, this office also coordinates graduate student payroll, tuition scholarships, registration, liaison with VIS, health insurance, graduate school requests, graduation filing, and course scheduling. Questions regarding academic procedure can be directed to Ginny Clancy in this office as well as to the Graduate Program Director (see below). Questions on applications, admission, and transcripts can be directed to Christina Fink, Graduate Admissions Coordinator.

*Faculty and Graduate Faculty*: The faculty of SoMAS are the best resource available to you in your progress towards an advanced degree. You will likely interact with faculty through lectures, seminars, research, and informal discussions. All members of the faculty have a vested interest in the progress of our students; they differ only in personal style. There are several categories of faculty associated with SoMAS, including tenure-track faculty, adjunct faculty, and joint and affiliated faculty.

Only faculty who have Graduate Faculty status (which includes some outside SoMAS, listed at <u>https://www.stonybrook.edu/sb/graduatebulletin/current/academicprograms/mas/faculty.php</u>) may serve as advisors to M.S. and Ph.D. students, or serve as internal members of Ph.D. dissertation committees.

*Graduate Programs Committee (GPC)*: This committee sets policy for the SoMAS graduate programs. The committee also approves Ph.D. dissertation committees, all student petitions, proposals for teaching practicums, and new and revised course offerings. The GPC strives to

include equal numbers of faculty and M.S./Ph.D. students, so volunteering to serve on this committee is a great way to support SoMAS and ensure the voice of students is heard.

*Graduate Programs Director (GPD)*: The GPD, currently Jackie Collier, has overall responsibility and authority for the SoMAS graduate program, including distribution of teaching assistantships (TAs), graduate assistantships (GAs), waivers of SoMAS requirements, changes in student status, approvals for students to take courses outside SoMAS, and more. When contacting the GPD, you must use the designated email address: <u>somas\_gpd@stonybrook.edu</u>

*Graduate School, The*: All SoMAS graduate programs operate under the authority of the Stony Brook University Graduate School. SoMAS has some latitude in the details of how our graduate program is run, but there are campus-wide rules set by the Graduate School that all students must follow. Information on Graduate School policies and procedures, and the Graduate Bulletin, can be found on the Graduate School web page: <u>https://grad.stonybrook.edu/</u>. The Graduate School offers access to a variety of resources ranging from student housing listings to the format required for theses and dissertations. Also located on the Graduate School webpages are a detailed listing of forms you will need during your tenure, they can be found here:<u>https://www.stonybrook.edu/commcms/grad/academics/student-resources.php</u>

*Graduate Student Advocate*: The Advocate is a graduate student working in the Graduate School who answers directly to the Dean of the Graduate School (not to be confused with the Dean of SoMAS). The Advocate will aid students experiencing difficulties in academic or administrative matters. This person can act as a mediator, ombudsperson, bureaucratic trouble-shooter, and more. If you encounter a problem during your graduate studies that you cannot resolve through SoMAS, please feel free to contact the Graduate Student Advocate at www.grad.stonybrook.edu/about/advocate.php.

*Graduate Student Organization (GSO)*: The GSO serves to identify and protect the rights of graduate students, advance their interests, provide a forum for public debate, and promote graduate student participation in university affairs. You pay dues to the GSO through your activity fee. The GSO has elected members on most university committees, and it provides students interested in serving the university an opportunity to do so. SoMAS usually has a student representative in the GSO (www.sbgso.org).

*International Student Advisor*: Sultan Hameed serves as a resource for international students in SoMAS to help them adjust to the United States educational system.

*MCP Faculty Director*: The MCP Faculty Director, currently Ellen Pikitch, has overall responsibility and authority for the M.A. in MCP program.

*Mentor (M. A. in MCP program):* Your mentor is a member of the faculty chosen by each student in the SoMAS M. A. program. Mentors guide you through your capstone or internship research, and ensure you are fulfilling the program requirements for your capstone/internship. You should choose your mentor by the beginning of your second semester– the arrangement is by the mutual consent of you and your potential mentor. <u>You cannot enroll in your capstone or internship credits without an official mentor.</u>

*SoMAS Graduate Student Club (GSC)*: The SoMAS GSC exists to build a sense of community among graduate students, faculty, and staff. The club hosts the annual Okubo Visiting Scholar, and helps organize traditional SoMAS activities such as Vax to Flax race and Okubo. All SoMAS graduate students are welcome to participate in the club and its activities. Students interested in taking an active role in the club should email <u>somasgradclub@gmail.com</u> for additional information or speak to a club officer.

*Visa and Immigration Services*: The Office of Visa and Immigration services provides extensive support for foreign students at Stony Brook dealing with immigration and other issues. Please visit <u>http://www.stonybrook.edu/commcms/visa/</u> for more information. An International Student Advisor will be assigned to international students based on the student's last name.

# 3 General University Degree Requirements

There are some general university requirements that all SoMAS graduate students must meet. Failure to meet these requirements may result in not being allowed to register for classes, losing financial support, and even dismissal from the program. Information about these Stony Brook University degree requirements can be found in the Graduate Bulletin under Academic Regulations and Procedures and Degree Requirements.

#### 3.1 Registration

All students must be registered appropriately in Fall and Spring for the correct credit load from the time they start the program until they complete the degree requirements and submit their thesis, or withdraw from the program. The only exception to this registration requirement is a Leave of Absence. Part-time students must register for at least one credit each semester to maintain status in the program. You must be registered for at least one credit by the beginning of every Fall and Spring semester or you will have to pay a late-fee; similar fees apply in the summer, and the Graduate School sets these deadlines each semester. Not being correctly enrolled each semester puts your Graduate Tuition Scholarship in jeopardy. To maintain proper visa status, international students must be registered full-time in Fall and Spring to receive a stipend as well as a graduate tuition scholarship.

Full-time enrollment status for M.A. students:	9 credits
Full-time enrollment status for M.S. students: First year with less than 24 graduate credits completed (G1 status) Second year and beyond (G2 status)	12 credits* 9 credits
Full-time enrollment status for Ph.D. students: First year with less than 24 graduate credits complete (G3 status) Second year and beyond, but before advancement to candidacy (G4 status) After advancement to candidacy (G5 status)	12 credits* 9 credits 9 credits

\*A change in policy during the 2021-2022 academic year means that first-year students may be considered full-time if registered for 9 (rather than 12) credits. Students paying their own tuition may wish to take advantage of that change if it is advantageous to them, but students with Graduate Tuition Scholarships should register for 12 credits to ensure no delay in degree completion.

To graduate in Fall or Spring, you must be registered for at least one credit in the semester you complete your degree requirements. Usually, this will be research with your advisor. Domestic M.S. students may graduate in Summer or Winter while registered for zero credits of summer or winter research (MAR 800, which was created as zero credits because the

Graduate Tuition Scholarship does not cover summer or winter). A change of policy in 2023-2024 requires that International M.S. students and ALL Ph.D. students must be registered for 1 credit of GRD700 or GRD800 (respectively) to graduate in Summer or Winter. For students with a Graduate Tuition Scholarship, the Graduate School will pay for the GRD700/800 tuition (you will need to pay the fees). BUT Graduate School policy also says that will be the end of your GTS – DO NOT apply to graduate in Summer or Winter if you are not confident you will finish.

#### 3.2 Grading System and Academic Probation

The <u>grading system</u> is explained in detail in the <u>Graduate Bulletin</u>. The Graduate School requires that graduate students maintain a cumulative grade point average (GPA) greater than 3.0 for courses numbered 500 or greater. Students with a GPA below 3.0 will be placed on academic probation, and students who have not raised their GPA above 3.0 after two semesters on probation will not be permitted to re-enroll. No grade less than a "C" can be used to complete degree requirements. There is no graduate level grade of "D".

#### 3.3 Administrative Requirements for Graduation

Students expecting to graduate in a given semester must be registered, apply for graduation before the university deadline (online with the Graduate School, and the deadline is very early in the semester!), and complete all university and SoMAS requirements on time. Timeliness is important so the GPD can review your records and recommend to the Dean of the Graduate School that the degree be granted. Candidates who do not complete degree requirements must reapply for graduation during a subsequent semester. M.S. and Ph.D. students must complete the internal **request to graduate form** and have it approved by their supervisor <u>before</u> filing for graduation. This is to avoid applying for graduation unless you and your advisor are confident you will finish; changing your graduation application requires a special form, which must be submitted in a timely manner because you will not be able to register until it is processed and there is often a lot of other paperwork to continue your status.

Please note that formal commencement ceremonies are only held at the end of the Spring semester (in May). If you graduate in Summer or Fall, you may participate in either the preceding or the following spring ceremony. Please consult the official SBU commencement webpages for details on participating in commencement.

#### 3.4 <u>Credit Requirements and Time Limits</u>

At least two semesters of full-time study must be spent at Stony Brook. The Graduate School requires at least thirty graduate credits with an overall B average to obtain a degree. The M.A. and M.S. degrees must be completed within three years. An extension may be requested from the Graduate School, but approval is not automatic.

Ph.D. students should complete all requirements for their degrees within four years after advancing to candidacy. The Graduate School requires that all Ph.D. candidates satisfy all

requirements for the Ph.D. degree within seven years after completing twenty-four graduate credit hours at SoMAS. A petition can be submitted to the Graduate School to extend the time limit, but approval is not automatic.

#### 3.5 <u>Residency (only applies to domestic students)</u>

All domestic students must become New York state residents before the start of their second year. This does not apply to international students (who are not eligible). Graduate tuition scholarships will only pay for in-state tuition rates, and you will receive a substantial tuition bill that you will be responsible for the difference between in state and out of state rate if you do not establish New York residency before the beginning of your second year. This information was included in your offer letter, and more information about residency requirements, including the form you will need to eventually submit to the university can be found here: <a href="https://www.stonybrook.edu/commcms/bursar/residency/graduate-professional-students">https://www.stonybrook.edu/commcms/bursar/residency/graduate-professional-students</a>

# 4 M.A. in Marine Conservation and Policy (MCP) Requirements

In addition to the general university degree requirements (see Section 3 above)...

#### 4.1 General MCP Coursework Description

The MCP program consists of advanced coursework in six skill areas: 1) marine science, 2) marine conservation biology, 3) marine management, economics, policy and law, 4) communications, 5) quantitative data analysis, and 6) field biology. Each degree candidate will choose elective coursework under the supervision of the Coordinating Committee within all of these areas to best suit their specific postgraduate career objectives. Students must also conduct an in-depth Capstone Study or Internship involving analysis of available data, and produce an original synthesis paper based on a committee-approved, consequential topic in marine conservation and policy. Candidates must also formally present their work in a program-wide symposium.

The MCP program is designed to be completed in twelve months of full-time study, and requires a minimum of 30 credits of coursework. Due to the elective nature of the curriculum, most students will complete additional credits for their degree. Although designed for one year of full-time study, the program can also be completed over a longer period of time; some students elect to do a more comprehensive Internship or Capstone Project thus extending their duration of study, and others have chosen to also complete an Advanced Graduate Certificate (see below) which also typically extends their course of study. The MCP program is not designed for part-time students who are only able to enroll in night or online classes. However, part-time students can complete this program through a careful choice of courses provided they have some ability to take classes taught during traditional business hours. All students should check with their lender, if applicable, about mandatory credit loads.

#### 4.2 MCP Skill Area Requirements

There are required and elective courses from groups A through F below, plus six credits from group G.

- A) Marine Sciences: two courses, one of which has to be in a basic biological field.
- B) Conservation: two courses; MAR 507 (Marine Conservation Biology) required, plus one elective.
- C) Communications: two courses; MAR 557 (Case Study and Project Planning Seminar) required, and either a Journalism course (either COM 565 or COM 522), or MAR 556 (Policy 3Rs – Read, Write, Raise \$).
- D) Policy/Law/Economics/Management: one course.
- E) Quantitative Assessment: one course.
- F) Field Biology: one course.

G) Capstone Project (MAR 589) or Internship in Marine Conservation and Policy (MAR 592); six credits required for either option. The capstone project or internship can be completed during the summer or during the academic year. A prospectus must be approved by MCP Coordinating Committee and the Internship or Capstone Permission Form must be submitted prior to registration for credits.

Courses from other departments or sometimes other universities can potentially be used to fulfill MCP degree requirements with permission of the MCP Faculty Director. Some courses can fulfill more than one requirement, but students need to complete at least 30 credits to earn the degree. No more than 6 credits earned prior to enrollment in the MCP program can be used to fulfill the 30 credit program requirement.

#### 4.3 For Those Doing a Capstone Project: Prospectus for Capstone Project Credits (MAR 589)

A capstone project provides an opportunity for students to explore a topic in detail, usually involving independent analysis of information collected by others to address a problem of consequence in your field. It is anticipated that most students will conduct their Capstone Project during the summer, working on projects developed during the required Case Study and Project Planning Seminar (MAR 557). However, it is also possible to earn Capstone Project credits during the spring or fall semesters. Students wishing to start on their Capstone Project prior to completing MAR 557 must make the necessary arrangements and get approval from both their SoMAS faculty mentor for the MAR 589 credits and from the MCP Faculty Director before commencing their project. Retroactive requests are usually not approved except in unusual circumstances.

Discuss your project plans with your interim mentor or the MCP Faculty Director or Assistant Director. Once the plan has reached the point of approval, prepare a one-page prospectus providing the following information and submit it along with the **Internship or Capstone Permission Form** to the MCP Faculty Director and Assistant Director:

- 1. Title of project
- 2. Your name and contact information
- 3. A description of the study you expect to undertake. The study should explore a problem or issue in depth and requiring independent analysis on your part.
- 4. A description of how much of your project you anticipate completing during the semester in question, and how you will demonstrate completion of this aspect of your project. Normally you will keep a journal describing your activities. You are expected to write a ten- to fifteen-page, double-spaced report detailing what you learned and why it is important prior to completing your project. Further details of expectations for these papers will be discussed in MAR 557. All students will give an oral presentation on their capstone projects, usually during the annual MCP symposium in August.

Once your prospectus is approved, you may register for the project credits. This must be done before the end of the add/drop period. Once you have permission, you must go into

SOLAR and register for MAR 589 with the correct number of credits under the section associated with your mentor.

You should provide a progress report to your MAR 589 faculty mentor mid-way through the semester. The MCP Faculty Director will send out deadlines for outlines, drafts, and your final paper. At the end of the semester, prepare and submit your report. If you complete your six credits of capstone project at a time other than the summer, and cannot participate in the Symposium, you will also need to schedule a time to present your capstone project in an oral presentation.

#### 4.4 For Those Doing an Internship: Prospectus for Internship Credits (MAR 592)

An internship is a valuable way for students to obtain real-world experience with a company, governmental organization, non-governmental organization (NGO), educational facility, etc. Although we will suggest possible internship opportunities, students often discover opportunities on their own and bring them to the MCP Faculty Director for consideration. It is anticipated that most students will conduct their internship during the summer, taking MAR 592, and working on projects developed during the required Case Study and Project Planning Seminar (MAR 557). However, it is also possible to earn internship credits during the spring or fall semesters. Students wishing to start internship activities prior to completing MAR 557 must get approval from the MCP Faculty Director and their MCP mentor/ MAR 592 instructor of record before commencing their internship.

Discuss your internship plans with your mentor and/or the MCP Faculty Director. Once the plan has reached the point of approval, prepare a one-page prospectus providing the following information and submit it along with your **Internship or Capstone Permission Form** to the MCP Faculty Director and Assistant Director:

- 1. Title of project.
- 2. Your name and contact information.
- 3. The organization you will be interning with.
- 4. A description of the work you expect to do and the project you plan to focus on.
- 5. A description of how your work will be assessed during the semester. All internships must have intellectual content in addition to the practical experience you will receive. As part of your internship you are expected to write a ten- to fifteen-page, double-spaced report detailing what you learned and why it is important prior to completing your project. Further details of expectations for these papers will be discussed in MAR 557. All students will give an oral presentation on their capstone projects, usually during the annual MCP symposium in August.

Once the Faculty Director approves your prospectus, you may register for MAR 592. This must be done before the end of the add/drop period, by enrolling for the correct number of credits.

You should provide a progress report to your faculty mentor/MAR 592 faculty instructor of record mid-way through the semester. The MCP Faculty Director will send out deadlines for outlines, drafts, and your final paper. Prepare and submit your report at the end of the semester. If you complete your six credits of internship at a time other than the summer, and

cannot participate in the Symposium, you will also need to schedule a time to present your internship project in an oral presentation.

# 4.5 MCP Students enrolling in additional Advanced Graduate Certificates (Optional)

Students wishing to enroll in an Advanced Graduate Certificate program in addition to their graduate program need to complete the appropriate form, get permission from the Graduate Program Director and the Assistant MCP Director. You should enroll as early as possible to ensure the maximum number of courses you take to fulfill your MCP program can also count towards your Graduate Certificate. You must graduate with your M.A. degree and certificate degree in the same semester, they cannot be completed in different semesters.

**Please note** that if you are enrolled in a secondary certificate program, you will likely have to take at least 1 extra semester to graduate. You cannot obtain your MCP degree until you have also completed the Advanced Graduate Certificate.

# 4.6 <u>Steps Towards Graduation and Timeline</u>

The schedule below describes a typical student completing their program of study in one year beginning in the fall. It is very important to plan out the entire year at the beginning of the program to ensure you meet all program requirements by the end of the year. Students graduating in Summer are permitted to walk in either the preceding or following Spring Commencement Ceremony (see section 3.3).

# Fall Semester:

- Meet with the MCP Assistant Director and plan your courses to best address individual career goals and ensure you can complete the curriculum within the desired time.
- Complete Marine Conservation (MAR 507), Case Study and Project Planning Seminar (MAR 557), and two to three additional courses if full-time.
- You will prepare your capstone project or internship proposal as part of the requirements for MAR 557.

Winter Session:

- Take a Field Biology course, e.g. Tropical Marine Ecology (MAR 537) or Marine Protected Areas (MAR 532). *Note - there is also a summer field course option which some students may opt to take instead of the winter options*.
- As part of your project proposal for MAR 557, you will identify potential SoMAS mentors. You should begin communicating with potential mentors to work towards finalizing the mentor relationship.

Spring Semester:

- Complete required coursework and finalize plans for your capstone project or internship.
- The proposal drafted in MAR 557 should be the basis for your prospectus, which must be submitted to the MCP Program Director for approval along

with your Internship or Capstone Permission Form (submit Prospectus for Internship or Capstone Study and Internship or Capstone Permission Form).

Summer Session:

- Register for Capstone Project in Marine Conservation and Policy (MAR 589) or Internship in Marine Conservation and Policy (MAR 592) under your mentor's section number. You must have 6 credits total of MAR 589 or MAR 592.
- Complete Field Biology course requirement by taking Long Island Marine Habitats (MAR 531) if you did not fulfill this requirement during the winter, or other MCP Director-approved course as appropriate.
- Apply in Solar to graduate.
- Communicate with your mentor and incorporate their feedback into drafts of your capstone project of internship report.
- Submit your capstone project or internship report.
- Give your oral presentation as part of the annual MCP symposium.
- Graduate!

Fall Semester, 2<sup>nd</sup> Year (Optional):

If students are still working on capstone/internships into the fall, they can remain a student in good standing by registering for at least 1 credit of capstone/internship. Students continuing to work towards an Advanced Graduate Certificate or part-time students continuing to work on their checklist requirements need only to register in the courses they still

need to complete.

# 5 M.S. in Marine, Atmospheric, and Sustainability Sciences Requirements

# 5.1 M.S. Program Learning Outcomes (PLO) and Overview

Graduates of the M.S. program in Marine, Atmospheric, and Sustainability Sciences will be able to:

- 1. **Apply** laboratory, theoretical, computational, or other appropriate research techniques necessary to contribute to the development of knowledge in their field of specialty in Marine, Atmospheric, and/or Sustainability Science,
- 2. Critically evaluate the literature in their field of specialty, and
- 3. **Assemble and effectively communicate**, in formats appropriate for different audiences, the context, results, and implications of their own thesis research.

In addition to the general university requirements (Section 3 above), each student must complete at least:

- · 4 <u>Core courses</u>
- · 2 Foundation courses
- · 3 Specialty courses
- 6 credits of Thesis **<u>Research</u>**
- 5 additional credits of <u>Elective</u> coursework.

# Program Learning Outcomes (PLOs) mapped to each element of M.S. degree

PLOs (as numbered above):		1	2	3
Core courses	I	х		[ ]
Foundation courses		х		
Specialty courses		х	х	
M.S. Thesis proposal			х	х
Thesis presentation			х	х
Final Approved Thesis	T		х	х
	l			

# 5.2 Planning your coursework

Our flexible, student-centered curriculum means that your first task is to work with your Advisory Committee (your prospective advisor and at least one other faculty member) to choose Foundation and Specialty courses and plan when you will take the courses you choose. You will be provided with a Google Drive folder containing spreadsheets and forms to help you organize this effort and be required to submit your plan to the Graduate Program Director and Graduate Program Committee using that folder - typically by August 1 - for approval before the start of classes your first semester. This approval process is intended to ensure that everyone is on track and that course substitutions are approved in a consistent manner. Make the best choices you can, but also know that you will be able to modify your plan as necessary, with deadlines for updating course plans typically each November and June. It is important that your plan always be up to date because our record of your last approved plan will form the basis for officially clearing you for graduation when your time at SoMAS comes to an end.

When filling out the Course Plan forms, please provide both course number and course name; none of us have all of them memorized and providing both can help GPC catch errors. This also applies to Directed Study (MAR 552), for which you should provide both the name of the faculty member (most likely your advisor) to be the official instructor and a brief topic description as the course title.

# 5.3 Course Requirements

The M.S. degree requires a minimum of 30 credits, and the course requirements are divided into five components: Core, Foundation, Specialty, Research, and Elective. **SoMAS requires**\* that all M.S. students pass the Core and Foundation courses with at least a B average, and with no grade falling below a C. This is in addition to the graduate school overall GPA policy noted earlier.

# 5.3.1 <u>Core Courses</u>

The Core consists of 4 courses that add up to 4 credits:

- MAR 527: Current Issues in Global Climate Change (2 credits, Fall)
- MAR 543: Critical Reading and Proposal Development (1 credit, Spring)
- MAR 591: RCRS and Professional Development (1 credit, Spring)
- and two semesters of either<sup>1</sup>
  - MAR 580: Oceans, Sustainability, and Atmospheres Colloquium (0 credit, Fall and Spring)

Or

o SUS 580: Research Seminar (O credit, Fall and Spring)

<sup>&</sup>lt;sup>1</sup> You must register for this 0-credit course in both your first fall and spring semester.

#### 5.3.2 <u>Foundation Courses</u>

M.S. students must take at least 2 Foundation courses from the list below. When alternative coursework (e.g., from another department at SBU) would be more foundational, with agreement of your Advisory Committee you may petition the Graduate Programs Committee for approval of a substitution.

- MAR 501: Physical Oceanography
- MAR 502: Biological Oceanography (Spring)
- MAR 503: Chemical Oceanography (Spring)
- MAR 504: Statistics and Experimental Design
- MAR 506: Geological Oceanography
- MAR 508: Found Mar Sci 1: Biogeochemical (Fall)
- MAR 509: Found Mar Sci 2: Physics of Oceans, Atmos, Climate (Fall)
- MAR 516: Ecosystem Science for Fisheries Management (Fall)
- MAR 541: Foundations of Atmospheric Sciences I (Fall)
- MAR 542: Foundations of Atmospheric Sciences II (Fall)
- MAR 545: Paleoceanography and Paleoclimatology
- MAR 547: Geophysical Fluid Dynamics I (Spring)
- SUS 502: Perspectives on Sustainability

# 5.3.3 Specialty Courses

Each student must also complete at least 3 Specialty courses (at least 3 credits each for at least 9 credits) selected from among all the regular MAR and SUS graduate courses excluding 'seminar' courses (MAR 519, MAR 584, MAR 585, MAR 603), courses specific to the M.A. program (MAR 556, MAR 557, MAR 589, MAR 592), and with no more than 3 credits of MAR 552 (Directed Study). Courses from outside SoMAS may also count toward this requirement with approval of the Advisory Committee and Graduate Programs Committee.

# 5.3.4 <u>Research</u>

Each student must satisfactorily complete (grade 'S') at least 6 credits of research (MAR 590). First-year students will usually register for at least one to three credits of Directed Study (MAR 552) or Research (MAR 590) as an exploration of possible research topics and potential advisors. This can be done in the first and/or second semester, but must be done under the supervision of a faculty member. Sign up for the section number of these courses belonging to the appropriate faculty member.

# 5.3.5 <u>Elective</u>

The remaining 5 credits may comprise additional elective coursework (including SoMAS 1- and 2-credit seminar courses, JRN graduate courses focused on science communication, etc.) and/or research credits.

5.3.6 <u>Consequences of Not Achieving at Least a B Average in the Core and Foundation Courses</u>

Students who fail to meet the minimum grade for specific required courses must, before the beginning of their third semester, have a plan to remedy their academic standing in the program approved by the GPC. A written description of the remedy and a **completed petition form** should be submitted immediately to the GPC after your grades for the three required courses are available. The remedy should be developed with the help of your advisory committee and relevant foundation course instructors. The usual remedy will either be the retaking of whichever course(s) is(are) required to bring the student into compliance with the course grade requirement, or the completion of a specialized course (not a seminar-style course or directed study) in the same field as the core course(s) in which the student did not do well.

# 5.3.7 Another Word on Seminars

All first-year students are required to ENROLL AND ATTEND a weekly seminar series during both the Fall and Spring semesters, and to register for zero credits of MAR 580 or SUS 580 to track completion of this requirement. Students oriented toward marine sciences will typically register for MAR 580, section 01 for zero credits and attend the regular Friday Oceans, Sustainability, and Atmospheres Colloquium (OSAC). Students oriented toward atmospheric sciences will typically register for MAR 580, section 02 for zero credits and attend the regular Wednesday Topics in Atmospheres and Oceans Colloquium (TAOS). Part-time students who cannot attend the seminar regularly can arrange with the seminar coordinator(s) to attend approved seminars at any academic institution or national meeting of a scientific society. No more than two seminars can be missed in any semester to fulfill the seminar requirement. Seminars provide opportunities to learn the breadth and methods of scientific inquiry, practice scientific discourse and critical thinking, and are an opportunity to begin networking; you should continue to attend the weekly seminars after your first year as well.

# 5.4 <u>Research Proposal and Thesis Committee</u>

The written proposal for your M.S. research must be completed before you begin your second year of study, and be signed by your advisor and two readers (your thesis committee). <u>The proposal cannot be submitted in the same semester that you graduate</u>. The proposal should include at minimum a statement of the project's objectives, background research on the problem, a description of the approach that will be taken, and a list of references cited. The proposal need not be long – if written well, approximately five single-spaced pages (not

including figures, tables, and references) could suffice. A copy of the proposal with a completed and attached **M.S. Thesis Research Proposal form** (see Forms folder on your Orientation flash drive) should be emailed to Ginny Clancy in Educational Programs Office. Students who fail to complete their proposal by the end of the third semester may lose their tuition scholarships.

Your thesis committee consists of an advisor who must be a SoMAS Graduate Faculty member, and at least two additional readers who usually are, but do not have to be, SoMAS Graduate Faculty. Readers who are external to SoMAS must be approved by the GPC <u>before</u> you ask for their approval of your proposal. To request this approval, email a short justification for how the external member provides expertise not available from SoMAS Graduate Faculty members along with a short C.V. of the desired external thesis reader to Ginny Clancy, who will forward your request to the GPD and GPC. Once your committee approves your proposal, submit it along with the signed **M.S. Thesis Research Proposal form** (see Forms folder on your Orientation flash drive for relevant form). Your thesis committee will supervise and evaluate your research, and must approve your thesis before you can graduate. Any changes to your M.S. thesis committee after submitting your signed Research Proposal must be approved by the GPC.

#### 5.4.1 <u>Committee Meetings</u>

You should ideally meet with your thesis committee every six months to update them on your progress. At the very least you should provide the committee with a written report describing your progress, problems, any changes in research direction, and requests for advice about specific issues.

#### 5.5 <u>Final Thesis and Oral Presentation of the Thesis</u>

The rules governing formatting of the thesis are set by the Graduate School, and the content required for an acceptable thesis is set by your Thesis Committee. You are expected to give your committee plenty of time to read your thesis; generally, this will mean having a complete draft to them **at least two weeks before** your scheduled oral presentation. Writing a thesis takes much longer than many students expect.

Your thesis must be presented orally to the general public, and the presentation has to be made before the approved thesis is submitted to the Graduate School. Your advisor and thesis readers should attend the oral presentation and meet with you afterwards to discuss questions raised during the presentation and any other issues with the thesis. You must email Christina Fink in the Educational Programs Office with the day and time of the presentation <u>at least two weeks in advance</u> of the presentation date. A copy of the written thesis should be provided to all members of your thesis committee <u>at least one week in advance</u> of the presentation date.

Any formal public presentation of your thesis may be acceptable in fulfillment of the thesis presentation requirement as long as the presentation is properly advertised at least one

week in advance as being presented to satisfy the M.S. presentation requirement. The presentation could be given during a specially-scheduled time, during a class or seminar course, or conference subject to the approval of the course instructor(s), thesis committee, and the above constraints.

# 5.5.1 Thesis Approval and Submission

Your thesis committee will approve your thesis by signing the thesis title page. A signed title page may be held by your advisor until any necessary revisions are completed to the satisfaction of your thesis committee. The approved thesis is then submitted to the Graduate School. The thesis must be prepared according to the Graduate School's guidelines as described in the Guide to Preparation of Theses and Dissertations

(<u>http://grad.stonybrook.edu/academics/thesis\_dissertation\_guidelines.php</u>). The deadline for submission of theses each semester is set by the Graduate School. All students are responsible for uploading the documents into the portal on the Grad School webpage by the stated deadline.

In lieu of a thesis, the Graduate School will accept a manuscript that has been officially accepted for publication in a refereed journal as long as the manuscript is in the thesis format required by the Graduate School and approved by the M.S. thesis committee. The manuscript may have multiple authors as long as your work is clearly distinguished from other elements of the paper either by a separate letter from the other authors, or within the paper itself.

The official submission of your thesis must go through the Graduate School portal -PROQUEST. ·SoMAS M.S. students are required to deposit an open access copy of their dissertation or thesis in the <u>Stony Brook University Libraries' Academic Commons</u>. This is described in the Graduate School's <u>Guidelines for the Preparation of Theses and Dissertations -</u> <u>Electronic Submissions</u>. Students are permitted to submit their dissertation or thesis to Academic Commons only after their ProQuest submission has been fully accepted by the Graduate School.· Items submitted through the Academic Commons have full citations, download metrics, and a permanent, accessible link.

# 5.5.2 M.S. Completion Form

Once you have completed the oral presentation of your thesis, and your committee members have approved your thesis, you must collect their signatures on the **M.S. Thesis Completion form** (see Forms folder on your Orientation flash drive), and email the completed form to Ginny Clancy in the Educational Programs Office.

# 5.6 <u>Steps Towards Graduation and Timeline</u>

The schedule below describes a typical M.S. student completing their program of study in two to three years beginning in the fall. Before classes begin your first Semester, work with your

Advisory Committee to lay out a course plan for your degree; submit to GPD and GPC for approval BY FIRST DAY OF CLASSES.

Please note that there is a three-year limit on Graduate Tuition Scholarships for M.S. students.

First (fall) Semester:

- MAR 527 (Core, 2 credits)
- One or two Foundation courses (three or six credits).
- Maybe one specialty course (three credits).
- OSAC Seminar MAR 580.01, TAOS seminar MAR 580.2, or SUS 580 (zero credits).
- Remainder of twelve credits made up of thesis research (MAR 590) or directed study (MAR 552) with potential advisor.

Second (spring) Semester:

- MAR 543 and MAR 591 (Core, 1 credit each).
- One or two Foundation courses (three or six credits).
- OSAC Seminar MAR 580.01, TAOS seminar MAR 580.2, or SUS 580 (zero credits).
- One or two Specialty courses (three or six credits).
- Remainder of twelve credits made up of thesis research (MAR 590) or directed study (MAR 552) with potential advisor.
- Apply for New York State Residency through the Student Accounts Office (U. S. citizens only).
- Submit "Advisor Selection" form.

Summer:

• Submit M.S. thesis proposal with **"M.S. Thesis Research Proposal" form** before the fall semester starts.

Third (fall) Semester:

• Specialty courses, Electives, and thesis research (nine credits total).

Fourth (spring) Semester:

• Specialty courses, Electives, and thesis research (nine credits total).

Fifth and Sixth Semesters as Needed:

- Specialty courses, Electives, and thesis research (nine credits total).
- Apply to graduate in Solar for the semester you will complete your thesis.
- During the semester of graduation, domestic students must be registered for at least one credit (usually of MAR590) in Fall or Spring, or zero credits of MAR 800 if defending in the Summer or Winter. International students must be registered

full-time for a Fall or Spring graduation (usually in MAR590), and for one credit of GRD700 if completing in Summer or Winter.

- Present M.S. thesis seminar and submit **"M.S. Completion" form** to Ginny Clancy in the Educational Programs Office.
- Upload your signed M.S. thesis document to the Graduate School portal.
- Submit your M.S. thesis to Academic Commons.
- Graduate!

# 6 Ph.D. in Marine, Atmospheric, and Sustainability Sciences Requirements

# 6.1 Ph.D. Program Learning Outcomes (PLOs) and Overview

Graduates of the Ph.D. program will be able to:

- 1. **Synthesize, teach, apply, and critique** the fundamental concepts, theoretical foundations, and research methodologies of their field of specialty in Marine, Atmospheric, and/or Sustainability Science,
- 2. Critically evaluate the scholarly work of their peers,
- 3. **Formulate hypotheses and design plans** for research that will advance knowledge in their field of specialty in Marine, Atmospheric, and/or Sustainability Sciences, and
- 4. **Produce** a substantial body of tangible scholarly output valuable to researchers, practitioners, and consumers of Marine, Atmospheric, and/or Sustainability Sciences (e.g., publications, public presentations, research tools, and/or datasets).

In addition to the general university requirements (Section 3 above), each student must complete at least:

- · 4 <u>Core courses</u>
- · 3 Foundation courses
- 5 Specialty courses
- · 28 credits of Thesis or Dissertation Research
- 21 (unless starting as G4) additional credits of <u>Elective</u> coursework.

Program Learning Outcomes (PLOs) mapped to each element of Ph.D. degree

PLOs (as numbered above):	1	2	3	4	
Core courses	х		х		
Foundation courses	x				
Specialty courses	х	х			
Preliminary exam		х	х		
Qualifying exam		х	х		
Dissertation defense		х	х	х	
Final Approved Dissertation		х	х	х	

#### 6.2 Planning your coursework

Our flexible, student-centered curriculum means that your first task is to work with your Advisory Committee (your prospective advisor and at least one other faculty member) to choose Foundation and Specialty courses and plan when you will take the courses you choose. You will be provided with a Google Drive folder containing spreadsheets and forms to help you organize this effort and be required to submit your plan to the Graduate Program Director and Graduate Program Committee using that folder – typically by August 1 - for approval before the start of classes your first semester. This approval process is intended to ensure that everyone is on track and that course substitutions are approved in a consistent manner. Make the best choices you can, but also know that you will be able to modify your plan as necessary, with deadlines for updating course plans typically each November and June. It is important that your plan always be up to date because our record of your last approved plan will form the basis for officially clearing you for graduation when your time at SoMAS comes to an end.

When filling out the Course Plan forms, please provide both course number and course name; none of us have all of them memorized and providing both can help GPC catch errors. This also applies to Directed Study (MAR 655), for which you should provide both the name of the faculty member (most likely your advisor) to be the official instructor and a brief topic description as the course title.

# 6.3 <u>Course Requirements</u>

The Ph.D. degree requires a minimum of 78 credits (72 for a student entering with an M.S. degree), and the course requirements are divided into five components: Core, Foundation, Specialty, Research, and Elective. SoMAS requires that all Ph.D. students pass the Core and Foundation courses with at least a B average, and with no grade falling below a C. This is in addition to the graduate school overall GPA policy noted earlier.

# 6.3.1 <u>Core Courses</u>

The Core consists of 4 credits in 4 courses, which should be completed in the first two semesters:

MAR 527: Current Issues in Global Climate Change (2 credits, Fall)

MAR 591: RCRS and Professional Development (1 credit, Spring)

MAR 543: Critical Reading and Proposal Development (1 credit, Spring)

and two semesters of (you must register for this 0-credit course in both your first fall and spring semester)

MAR 580: Oceans, Sustainability, and Atmospheres Colloquium (0 credit, Fall and Spring) Or

SUS 580: Research Seminar (0 credit, Fall and Spring)

#### 6.3.2 Foundation Courses

Ph.D. students must take at least 3 Foundation courses from the list below. The Foundation courses should be completed in the first two semesters. When alternative coursework (e.g., from another department at SBU) would be more foundational, you may petition the Graduate Programs Committee for approval of a substitution with agreement of your Advisory Committee.

- MAR 501: Physical Oceanography
- MAR 502: Biological Oceanography (Spring)
- MAR 503: Chemical Oceanography (Spring)
- MAR 504: Statistics and Experimental Design
- MAR 506: Geological Oceanography
- MAR 508: Found Mar Sci 1: Biogeochemical (Fall)
- MAR 509: Found Mar Sci 2: Physics of Oceans, Atmos, Climate (Fall)
- MAR 516: Ecosystem Science for Fisheries Management (Fall)
- MAR 541: Foundations of Atmospheric Sciences I (Fall)
- MAR 542: Foundations of Atmospheric Sciences II (Fall)
- MAR 545: Paleoceanography and Paleoclimatology
- MAR 547: Geophysical Fluid Dynamics I (Spring)
- SUS 502: Perspectives on Sustainability

#### 6.3.3 <u>Specialty Courses</u>

Each student must also complete at least 5 Specialty courses (at least 3 credits each for at least 15 credits) selected from among all the regular MAR and SUS graduate courses excluding 'seminar' courses (MAR 519, MAR 584, MAR 585, MAR 603), courses specific to the M.A. program (MAR 556, MAR 557, MAR 589, MAR 592), and with no more than 3 credits of MAR 655 (Directed Study). Courses from outside SoMAS may also count toward this requirement with approval of the Advisory Committee and Graduate Programs Committee.

# 6.3.4 <u>Research</u>

Each student must complete (grade 'S') at least 10 credits of dissertation research (MAR 650) plus at least 18 credits of MAR 699 after advancement to candidacy. First-year students will usually register for at least one to three credits of Directed Study (MAR 655) or Research (MAR 650) as an exploration of possible research topics and potential advisors. This can be done in the first and/or second semester, but must be done under the supervision of a faculty member. Sign up for the section number of these courses belonging to the appropriate faculty member.

#### 6.3.5 <u>Elective</u>

The remaining 21 credits (15 for students entering with an M.S.) may comprise additional elective coursework (including SoMAS 1- and 2-credit seminar courses, JRN graduate courses focused on science communication, etc.) and/or research credits.

#### 6.3.6 <u>Teaching Practicum</u>

At least one credit of Teaching Practicum (MAR 670) – see Section 6.4 below for more information. The Teaching Practicum must be completed before advancement to candidacy.

#### 6.3.7 <u>Consequences of Not Achieving at Least a B Average in the Core and Foundation Courses</u>

Students who fail to meet the minimum grade for specific required courses must, before the beginning of their third semester, have a plan to remedy their academic standing in the program approved by the GPC. A written description of the remedy and a **completed petition form** should be submitted immediately to the GPC after your grades for the three required courses are available. The remedy should be developed with the help of your counselor or advisor and relevant foundation course instructors. The usual remedy will either be the retaking of whichever course(s) is(are) required to bring the student into compliance with the course grade requirement, or the completion of a specialized course (not a seminar-style course or directed study) in the same field as the core course(s) in which you did not do well.

Please note that students who fail to achieve the B average in the Core and Foundation courses will be required to either delay taking the Preliminary Exam (Section 6.5) to allow time to remedy the course grade average, or switch to the M.S. program.

#### 6.3.8 Another Word on Seminars

All first-year students are required to attend a weekly seminar series during both the Fall and Spring semesters, and to register for zero credits of MAR 580 or SUS 580 to track completion of this requirement. Students oriented toward marine sciences will typically register for MAR 580, section 01 for zero credits and attend the regular Friday Oceans, Sustainability, and Atmospheres Colloquium (OSAC). Students oriented toward atmospheric sciences will typically register for MAR 580, section 02 for zero credits and attend the regular Wednesday Topics in Atmospheres and Oceans Colloquium (TAOS). Part-time students who cannot attend the seminar regularly can arrange with the seminar coordinator(s) to attend approved seminars at any academic institution or national meeting of a scientific society. No more than two seminars can be missed in any semester to fulfill the seminar requirement Seminars provide opportunities to learn the breadth and methods of scientific inquiry, practice scientific discourse and critical thinking, and are an opportunity to begin networking; you should continue to attend the weekly seminars after your first year as well.

#### 6.4 <u>Teaching Practicum</u>

The goal of the teaching practicum is to help Ph.D. students develop the skills necessary to be effective instructors at the university-level. There are three components to this training:

- 1. *Observation* of teaching strategies employed by experienced instructors.
- 2. *Experience* preparing lesson plans, lecturing and leading discussions, and preparing/grading learning assessments (usually exams and assignments)
- 3. *Communication* with the supervising faculty member to help the student prepare their lectures or discussion sections, and provide the student with feedback.

The teaching practicum must be completed in a university-level (usually undergraduate) course under the supervision of the faculty member instructing that course. Any faculty member can accept students in MAR 670. There are many opportunities among our present courses to fulfill the practicum requirement. Routine TA assignments such as photocopying, helping to set up for class, or grading tests are not sufficient to satisfy the practicum requirement. It may be possible for students with TA assignments to complete the practicum at the same time – these arrangements must be made in advance.

The teaching practicum will typically be completed after the Preliminary Exam (Section 6.5), but no later than the end of your third year at SoMAS and must be completed before advancing to candidacy.

The following is a list of the requirements you must fulfill to complete the teaching practicum:

- Submit the Teaching Practicum form (see Forms folder on your Orientation flash drive) to Ginny Clancy for approval at least one month in advance of your student teaching. The form must describe how and when the teaching practicum requirements will be met, and signed by the supervising faculty member.
- Once the Teaching Practicum form has been approved by the GPC, email for permission to enroll to Ginny Clancy in the Educational Programs Office for at least one credit of MAR 670 (more than one credit only if your approved plan involves more than the minimum required effort; see below) in the section corresponding to the supervising faculty member.
- 3. Attend six to nine hours of the course to observe the teaching strategies employed by the instructor(s) and gain a sense of the level of material appropriate to the course.
- Meet with the supervising faculty member(s) to discuss the lesson plan, and provide a written copy of the lesson plan, notes, or slides before delivering any lectures or leading discussion.
- 5. Lecture or lead a discussion for a total duration of at least 160 minutes (*i.e.*, two one hour and twenty minute classes, three one hour classes, *etc.*).
- 6. Prepare learning assessments (typically exam questions or a homework assignment) on the material covered during the lectures or discussion you gave/lead.
- 7. Grade all students' responses to the assessment.

8. Meet with the supervising faculty member(s) after delivering the lectures or leading discussions to obtain feedback. It is advantageous to meet after the first lecture but before the second lecture if several lectures are given. Meet again with the supervising faculty member(s) after grading the assessments to debrief about how well the students achieved the learning you had hoped for, and what you might have done differently in hindsight.

The supervising faculty member may ask you (or you may want) to perform extra duties (*e.g.*, attend more classes, give extra lectures) in addition to those mentioned above. If so, you should register for additional credits (two to three) of MAR 670 in accordance with the workload. The extra duties should be decided in advance and described in the Teaching Practicum form along with an estimation of associated time commitments.

Faculty members should not take advantage of the teaching practicum by asking students to perform routine TA duties such as grading all class assignments, making photocopies, *etc.* 

The supervising faculty member should award a pass/fail grade to the student for MAR 670 at the completion of the teaching practicum. The teaching practicum evaluation form should be completed, signed and submitted from the handbook flash drive forms section to Ginny Clancy in the Educational Programs Office.

#### 6.5 <u>Preliminary Exam</u>

By the beginning of the second semester of their second year, each Ph.D. student should complete the <u>Preliminary Examination</u>. The Preliminary Exam will include written and oral components and will be used both to examine each student's mastery of the material in their Core and Foundation courses and to determine whether each student demonstrates the critical thinking and writing skills needed to prepare a dissertation proposal.

The Core and Foundation courses are expected to provide enough foundational knowledge of oceanography, atmospheric sciences, and sustainability - in the mix appropriate for each student - for successful participation in this Exam, but the goal of the exam is not simply to retest the knowledge and skills that were already tested in the Core and Foundation courses. Instead, success in the Preliminary Exam requires using that information and those skills to demonstrate the ability to address scientific questions and to articulate the multidisciplinary nature of many questions in marine, atmospheric, and sustainability sciences. The exam is as much about students' ability to think and to express themselves clearly, both in writing and in speaking, as it is about mastery of specific concepts.

If a student has special needs that would require testing accommodations, these must be communicated to the Graduate Programs Director and the chair of the Preliminary Examination

Committee as soon as the scheduling of exams begins, but at least two months before administration of the exam.

# 6.5.1 Goals of the Preliminary Exam

The goals of the Preliminary Exam are to determine if students can: 1) write clearly and succinctly, 2) develop/formulate a scientific question, an associated hypothesis, and an approach to successfully test it, 3) synthesize information learned from the courses and the primary literature, 4) orally present and explain scientific concepts, and 5) respond to questions in a manner that displays critical thinking. These are skills essential to those conducting or leading original research (and for many other life paths down which a Ph.D. might take our students).

# 6.5.2 <u>Mechanics</u>

The Preliminary Exam will be administered by the Preliminary Exam Committee (PEC) of the SoMAS Graduate Program Faculty. The PEC may delegate to subcommittees the task of examining groups of students who have taken the same, or substantially overlapping, Foundation courses - for example, students who have taken MAR 541 and MAR 542 might be one group. The PEC and subcommittees may include ad hoc members of the Graduate Program Faculty as necessary. Examiners must be members of the SoMAS Graduate Program Faculty. The role of a student's advisor in the exam will be determined by each subcommittee.

Students entering SoMAS in the Fall will take the exam between the end of the second semester and beginning of the fourth semester. Students beginning the Ph.D. under less typical circumstances (entering SoMAS in the Spring, completing their M.S. at SoMAS and then entering the Ph.D. program, etc.) will consult with their advisor and GPD to determine the best timing for their exam.

The Preliminary Exam will have two parts – a written exam and an oral exam. The exact format and content may vary depending on the student's Foundation courses and examination committee, so detailed instructions on the format and expectations will be provided prior to the exam.

The **written exam** is given first. It may be closed-book with a few hours to answer, or openbook with up to a week to answer. In either case, students are expected to work alone, without consulting anyone else about the exam. The exam may be based on a made-up scenario, real event, paper from the primary literature in the student's field, and/or material covered in the Core and Foundation courses. Students may be asked to answer questions, critique a paper, write a short review, and/or to write a short research proposal. Each student's **oral exam** will be administered by at least three faculty (members of the PEC or its subcommittees, with one serving as chair of the exam) specializing in fields relevant to the student's Foundation courses, and will begin approximately one week after the conclusion of the written portion of the exam. The oral exam may be based on the responses to the written exam and/or on a journal article provided at least one week before the oral exam. Each student makes a formal presentation to the examination committee based on their written exam responses and/or the assigned article, and answers questions which will not be limited to the contents of the written exam and/or paper, but will also include a range of basic concepts from the Core and Foundation courses that a doctoral student is expected to have mastered. The oral exam will last for approximately one to two hours.

#### 6.5.3 Assessment

The complete Preliminary Exam Committee will discuss each student's performance on both the written and oral portions of the exam, and then vote to either pass or fail. The results of the exam and evaluation of the student's performance will be given to them in writing and included in their file. Students who do not pass the exam will have the option of retaking the exam a second, final time the next time the exam is offered. However, students who do not pass the exam on their first attempt should consult with their advisor and other mentors to develop a plan about how best to move forward. For example, the student may decide to take the exam a second time, or to devote their energy into completing a M.S. degree; this latter option may better prepare them to return to pursue a Ph.D. A student failing the exam twice may not continue in the Ph.D. program, but may complete an M.S.

#### 6.6 Dissertation Committee

The dissertation committee advises you on your research and career, serves as examiners for your oral Qualifying (Preliminary) Exam and oral Dissertation Defense, and must approve the final written dissertation. You and your advisor will select the members of your dissertation committee; the GPC must approve your committee (**Approval of Ph.D. Dissertation Committee form** in Forms folder on your Orientation flash drive) before you schedule your oral Qualifying Exam, and you should seek GPC approval as soon as your committee members are identified. Any changes to your dissertation committee must be approved by the GPC, and the Graduate School generally prohibits changes to your committee within six months of your Dissertation Defense.

SoMAS requires that the dissertation committee be composed of five specialists in your field of research, or in closely related fields. The committee composition specifically includes:

- 1. Your advisor, who will act as your advocate and is prepared to supply any information that the committee may reasonably require.
- At least two other members of the SoMAS Graduate Faculty. If you have co-advisors, only one additional SoMAS Graduate Faculty member is required. One of these other Graduate Faculty members (not your advisor or co-advisor) will be designated as Chair

of the committee. The Chair is responsible for ensuring the Qualifying Exam and Dissertation Defense are conducted appropriately.

- 3. An outside scholar who has not been recently affiliated with SoMAS (which excludes SoMAS Adjunct Faculty, many of whom are members of the SoMAS Graduate Faculty and therefore serve as internal committee members). Your committee approval form should be submitted along with the C. V. of the outside person to verify their status and qualifications to Ginny Clancy for approval. Generally, the outside scholar should hold the rank of tenured faculty or equivalent at their institution, be sufficiently well-established to provide an independent assessment of the quality of your research, and be actively involved in research relevant to your dissertation.
- 4. The fifth member of your committee can be either SoMAS Graduate Faculty or from outside of SoMAS. If desired, dissertation committees can have more than five members, but only five are required.

# 6.6.1 <u>Dissertation Committee Meetings</u>

You are expected to meet with your committee at least once a year to provide the committee with an update on your research progress, problems, any changes in research direction, and requests for advice about specific issues. At the very least, you are required to annually update your dissertation committee in writing of progress made during the preceding year. You may be in for some very unpleasant surprises at your Dissertation Defense if you have not updated your entire dissertation committee on at least an annual basis. One of the committee's main roles is to provide advice about your research, and you cannot get that advice without meeting with your committee.

# 6.7 <u>Dissertation Proposal</u>

The written proposal for your Ph.D. research is due to your Dissertation Committee before your Qualifying Exam (see below), which must be completed before the end of your third year at SoMAS. The proposal should include at minimum a statement of your project's objectives, background to the research problem, clear and testable hypotheses, a description of the approach to be taken, expected results, a timeline for accomplishments, and appropriate figures and references. It will likely also contain preliminary data from research you've done during your first 1-3 years at SoMAS. Your dissertation proposal should be submitted to your committee members at least two weeks (three or four weeks would be better) before your Qualifying Exam.

# 6.7.1 Oral Qualifying Exam (Proposal Defense)

You must formally present and defend your dissertation proposal to your dissertation committee in order to pass the Qualifying Exam. This exam focuses specifically on your research proposal and your preparation to carry out the independent research you propose.

You should expect questions directly related to your research as well as more general questions designed to determine if you have acquired sufficient knowledge in fields specifically relevant to your thesis area.

Successful completion of the Qualifying Exam and Advancement to Candidacy (Section 6.6) must occur before the end of your third year of study. Failure to meet this requirement may result in the loss of your tuition scholarship.

Your dissertation committee may proceed in any way it sees fit to determine if you are qualified to perform your proposed research. All five committee members should be present for the exam; electronic means (*e.g.*, teleconferencing) of attendance are allowed. In exceptional circumstances, one of your committee members may participate in absentia, but this option must be discussed with the Graduate Program Director in advance. Your committee will submit its conclusions about your exam in writing to Ginny Clancy in the Educational Programs Office (see **Dissertation Proposal Defense Outcome form** in Forms folder on your Orientation flash drive). This is a critical step and must be done in a timely manner as it is the trigger to have your record updated to G 5, and advance you to candidacy status.

#### 6.8 <u>Advancement to Candidacy</u>

Stony Brook University stipulates that a student may not be advanced to candidacy until all requirements for the degree except writing and defending the dissertation itself (Section 6.9) have been met. <u>You must advance to candidacy before the end of your third year or risk</u> <u>losing your Graduate Tuition Scholarship</u>. As such, you should try to advance to candidacy as soon as reasonably possible. Furthermore, you cannot defend your dissertation within one year of advancing to candidacy (this is a Stony Brook University rule, not a SoMAS rule, and there are no exceptions).

Please note that you should not refer to yourself in any correspondence as a Ph.D. candidate until you have formally advanced to candidacy – doing so implies you have fulfilled all requirements for your degree except defending your dissertation (frequently referred to as "all but dissertation," or ABD). Ph.D. candidates who will not complete the dissertation may apply to be awarded (and graduate with) a Master of Philosophy instead of the Ph.D.

After your Advancement to candidacy is finalized and approved at the Graduate School, and you are coded as a G5, you should prepare your "Examining Committee Request Form" which is the approval of the committee at the Graduate School, well before you plan your final defense. This will be submitted to Ginny Clancy with the external members CVs.

#### 6.9 <u>Final Dissertation and Oral Dissertation Defense</u>

The rules governing formatting of the dissertation are set by the Graduate School, and the content required for an acceptable dissertation is set by your Dissertation Committee. You are expected to give your committee plenty of time to read your dissertation; generally, this will mean having a complete draft to them **three weeks before** your scheduled oral defense, or

according to an alternative deadline set by your committee. Writing a dissertation takes much longer than many students expect; this is but one of the many good reasons to publish your work as you go along so that parts of your dissertation are basically written by the time you begin putting your dissertation together.

Stony Brook University sets some very specific rules about your dissertation defense:

- 1. Your oral dissertation defense must take place at least one academic year after advancing to candidacy.
- 2. The composition of your dissertation committee (which should already have been approved by the GPC prior to your Qualifying Exam) must be submitted to the Graduate School for approval by completing the Request for Dissertation Examining Committee Appointment by emailing Ginny Clancy in the SoMAS Education Programs Office before the beginning of the semester in which the defense will occur and at least four weeks prior to the defense date, whichever is earlier. Any changes to your committee since your Qualifying Exam must be approved by the GPC before the above request form is submitted to the Graduate School. The Graduate School generally prohibits changes to your committee within six months of your defense.
- 3. The Dissertation Abstract/Announcement form must be prepared by the student, approved by the advisor, and emailed to Ginny Clancy in the SoMAS Educational Programs Office at least one month in advance of your defense date (and, why wait until the last minute?). She will then forward your Abstract/Announcement form to the GPD and the Graduate School. The abstract must be in the exact template on their webpage or it will not be accepted.
- 4. The defense will be open to the public and properly advertised. The defense begins with a presentation by you followed by questions from the audience. Your dissertation committee will usually hold their questions until a closed session after the public presentation.
- 5. Bring the Dissertation Defense Outcome form to your defense. If you pass, the form should be signed immediately by your committee; plan accordingly to collect signatures if one or more of your committee members will not be physically present at the defense. If you pass with conditions (e.g., revisions to your dissertation), or if you fail, the outcome should also be noted on the Dissertation Defense Outcome form and all signatures collected. In any case, email the completed form to Ginny Clancy in the Educational Programs Office. Please note this form is for SoMAS use only, and as such, a signed PDF is acceptable in lieu of original signatures of committee members who may be remotely participating.
- 6. As of this writing, the Graduate School requires that the **official signature page of the dissertation** be handled via Adobe Sign. Please consult with them for guidance and to avoid pitfalls arising from committee members signing in the wrong order.

- 7. You must submit the final signed copy of your dissertation to the Graduate School no later than three months of your defense date, or the Graduate School will require you to repeat your defense (this is a Stony Brook University rule, not a SoMAS rule, and there are no exceptions).
- 8. The official submission of your dissertation must go through the Graduate School portal PROQUEST. ·SoMAS Ph.D. students are required to deposit an open access copy of their dissertation or thesis in the <u>Stony Brook University Libraries' Academic Commons</u>. This is described in the Graduate School's <u>Guidelines for the Preparation of Theses and Dissertations Electronic Submissions</u>. Students are permitted to submit their dissertation or thesis to Academic Commons only after their ProQuest submission has been fully accepted by the Graduate School.· Items submitted through the Academic Commons have full citations, download metrics, and a permanent, accessible link.

# 6.10 Steps Towards Graduation and Timeline

The schedule below describes a typical Ph.D. student completing their program of study in four to six years beginning in the fall.

Before classes begin your first Semester, work with your Advisory Committee to lay out a course plan for your degree; submit to GPD and GPC for approval BY FIRST DAY OF CLASSES.

First (fall) Semester:

- MAR 527 (Core, 2 credits)
- One or two Foundation courses (three or six credits).
- Maybe one specialty course (three credits).
- OSAC Seminar MAR 580.01, TAOS seminar MAR 580.2, or SUS 580 (zero credits).
- Remainder of twelve credits made up of thesis research (MAR 650) or directed study (MAR 655) with potential advisor.

Second (spring) Semester:

- MAR 543 and MAR 591 (Core, 1 credit each).
- One or two Foundation courses (three or six credits).
- OSAC Seminar MAR 580.01, TAOS seminar MAR 580.2, or SUS 580 (zero credits).
- One or two Specialty courses (three or six credits).
- Remainder of twelve credits made up of thesis research (MAR 650) or directed study (MAR 655) with potential advisor.
- Apply for New York state residency (U. S. citizens only).
- Submit "Advisor Selection" form.

Third (fall) Semester:

• Preliminary Exam

- Specialty courses and thesis research (nine credits total).
- Start working on dissertation proposal.
- You may also complete your Teaching Practicum (see below)

Fourth (spring) Semester:

- Teaching Practicum MAR 670 (credits vary with teaching amount; submit **"Teaching Practicum" form** to the GPC at least one month in advance of actual teaching). Submit **"Teaching Practicum Evaluation" form** after the practicum has been completed.
- Specialty and/or Seminar courses, and dissertation research (nine credits total).
- Continue working on dissertation proposal; ideally complete dissertation proposal this semester.

Fifth and Sixth Semesters:

- Complete Teaching Practicum MAR 670 if you have not already done so.
- Complete dissertation proposal if you have not already done so.
- Form dissertation committee (submit "Approval of Ph.D. Dissertation Committee" form to the GPC; please make sure all requested information on the form is included with the submission).
- Take Qualifying Exam and submit "Ph.D. Qualifying (Preliminary) Exam (Proposal Defense) Outcome" form.
- Advance to Candidacy.
- Specialty and/or seminar courses as appropriate, and Dissertation Research MAR 650 or MAR 699 (MAR650 before and MAR699 after advancing to candidacy; nine credits total).

Seventh Semester and Beyond:

• Dissertation research and seminar courses as appropriate (nine credits total if full-time in residence, at least one credit if part-time unless a Leave of Absence is requested). Other than the required seminar courses (7.1.0#8 above), additional coursework after advancement to candidacy must be approved by the GPD.

Final Semester:

- Apply to graduate (please don't do this unless confident you will actually be ready to defend that semester)
- Must be registered for GRD800 if completing in Summer or Winter.
- Submit **"Doctoral Defense Announcement" form** (this form is located on <u>Graduate School's web page</u>).
- Defend dissertation (submit "Ph.D. Dissertation Defense Outcome" form).

- Get dissertation approved by your dissertation committee.
- Upload the completed dissertation with all revisions into the grad school portal by the posted deadline as well as the grad school signature page.
- Submit your Dissertation to Academic Commons.
- Graduate! Go to the Hooding Ceremony because you'll only do it once!

# 7 Other Policies

There are a variety of Stony Brook University and SoMAS-specific policies that may apply to you during your graduate studies at SoMAS. Many policies exist in other specific sections of this handbook. This section includes policies that do not clearly fit into other handbook sections but are still very important – although it is not an exhaustive list of policies that may affect you. Please read through the following polices so that you are familiar with all of them. Contact the Graduate Programs Director or email Ginny Clancy in the Education Programs Office if you cannot determine the appropriate person to contact with concerns after reading this handbook.

### 7.1 Sexual Harassment Policy

If you think that you have observed or been the victim of sexual harassment or any other type of discrimination, you should feel free to contact any faculty member, and there are several SoMAS faculty members who have specifically volunteered to be available discuss these types of concerns: Bob Cerrato, Jackie Collier, Anne McElroy, and David Black among them. These individuals know the university regulations about harassment and can discuss them with you. Other resources available include the Wo/Men's Center

(<u>https://www.stonybrook.edu/commcms/studentaffairs/cpo/wgrc/</u>), the Ombudsman Office (<u>www.stonybrook.edu/ombuds/</u>) and the Office of Diversity and Affirmative Action (<u>www.stonybrook.edu/diversity/index.html</u>).

# 7.2 <u>Responsible Conduct of Research and Scholarship (RCRS)</u>

SoMAS students are responsible for learning about, and adhering to, standards of professional conduct that are consistent with the responsible conduct of research and scholarship, and that will reflect favorably on themselves and on SoMAS. All students are required by Stony Brook University to participate in training focused on RCRS that will begin during orientation, and M.S. and Ph.D. students will receive further training in special sessions of MAR 568 (Practical Skills for Scientists). Additional training opportunities will also be offered. Students should be aware that dismissal from the program is a possible consequence for violation of the standards of responsible conduct in any component of their work toward the M.A., M.S., or Ph.D. degree (including coursework, teaching duties, and all aspects of research). SoMAS students should bring any questions or concerns about how to comply with any of these standards to any member of the faculty.

Plagiarism is the most common form of academic dishonesty and scientific misconduct that the program must respond to. A useful definition of plagiarism and guidelines on how to use and cite sources without plagiarizing them can be found at the University of California, Davis web site <u>https://ossja.ucdavis.edu/avoiding-plagiarism-mastering-art-scholarship</u>.

Students who have any uncertainty about what constitutes plagiarism, and how to avoid it, are responsible to ask questions of the faculty until the answers are clear.

Stony Brook University's definitions of academic dishonesty can be found at <u>www.stonybrook.edu/commcms/academic\_integrity/index.html</u>. Stony Brook's policy on RCRS can be found at <u>www.stonybrook.edu/policy/policies.shtml?ID=211</u>. Other web sites exploring responsible conduct in science include <u>ethics.agu.org</u> and <u>www.aslo.org/information/code.html</u>.

Also fitting under this general heading are the numerous regulations around various research activities, including use of radioisotopes, recombinant DNA, and vertebrate research subjects. You will likely be required to attend 'training'– starting with basic laboratory safety training – and to comply with other rules if your research involves these activities. Learning to manage these regulations is part of learning to do science, and in the long run it is advantageous to be proactive and compliant. Your advisor will be able to provide guidance.

### 7.3 <u>Grievance Policies</u>

If you are having problems of any kind, please first approach someone you are comfortable with – for example, your advisor or counselor, a member of your thesis or dissertation committee, the Graduate Program Director, the MCP Program Director or a member of the MCP Coordinating Committee - as they can usually help you resolve problems informally. The Graduate School's Graduate Student Advocate (Section 2.0) is also available to assist you, as is the Stony Brook University Ombudsman. We may not be able to solve all problems (however much we want to), but we certainly cannot solve problems we are not aware of.

If informal channels fail, a formal grievance procedure is available to you through the SoMAS Grievance Committee. A SoMAS Grievance Committee is formed when necessary and is composed of two faculty and two student members of the Graduate Programs Committee selected to avoid conflicts of interest. The Grievance Committee will hear and attempt to resolve conflicts between SoMAS parties according to university procedures. Contact the chair of the GPC or the GPD about filing a formal grievance. If any involved party is dissatisfied with the outcome of the SoMAS Grievance process, they may appeal to the Dean of the Graduate School, who will empanel a similar ad hoc Appeals Committee selected from among the members of the Graduate Council for guidance in formulating a final decision.

Following Graduate School policy, the SoMAS Grievance Committee process will also be used when necessary to adjudicate accusations of academic dishonesty.

#### 7.4 Leave of Absence and Withdrawal

If circumstances require a student to leave the Graduate Program for a long enough time that will prevent them from making satisfactory progress toward their degree, they must either request a leave of absence or formally withdraw from the university. Unauthorized leave or withdrawal – which means just dropping out of communication without requesting a leave -

may prevent a student from being able to return. If you expect to return the next semester or the next year, request a leave. Leaves can be extended for a second year with permission. If you do not know when (or whether) you will return, you should formally withdraw from the university.

A Leave of Absence request form may be obtained from the Graduate School web page. Endorsement of the GPD is required. Upon completion, the form will be sent to the Graduate School for approval by the Dean. The conditions governing leaves of absence and reinstatement are set by the Graduate School (not by SoMAS) and are described in the Graduate Bulletin. When you intend to return to the University, you must inform the GPD in writing before the expiration of the leave period granted to you. This notification should give a detailed account of any academic or professional activity you pursued during your leave. The GPD will endorse your request for reinstatement and forward it to the Graduate School. Upon receipt of your request and the GPD's endorsement, the Graduate School will reinstate you. If you do not request reinstatement before the expiration of your leave, the Graduate School will withdraw you from the university.

Formal withdrawal is initiated by submitting a letter explaining your intention to withdraw to the GPD and the Graduate School.

#### 7.5 Childbirth Accommodation

The Graduate School provides a variety of support programs for students. The Childbirth Accommodation policy provides relief from regular teaching or research assignments by providing support directly from Graduate School funds. One semester of relief for students on a Teaching Assistantship, or up to twelve weeks of relief for students on a Research Assistantship, is available. Leaves are requested though the GPD, and students interested in requesting leave should initiate discussions with their advisor and the GPD as early as possible, and no later than the twenty-fourth week of pregnancy.

#### 7.6 <u>Required Course Waiver</u>

The requirement to take any or all courses may be waived if proficiency in the course material can be demonstrated to the satisfaction of the instructor(s) as follows:

- The Advisory Committee may determine on the basis of discussions with a new student, and review of the student's record, that a reasonable case for waiving one or more required courses can be made. For example, an obvious case would be if the student has completed a similar course elsewhere and attained a grade of B or better.
- The student should meet with the appropriate course instructor(s), bringing copies of the prior course syllabus and any course notes, including the student's own handwritten notes. The instructor will decide whether or not the course should be waived based on the supplied material and a discussion with the student.
- 3. If the decision is that the course(s) already taken adequately covers a significant part of the material in a SoMAS course, then the student and instructor(s) should provide a

written statement (see Forms folder on your Orientation flash drive for the appropriate form) to the GPC, with a copy to the student's Counselor recommending that the requirement that the student take the course be waived. Such a statement should include any relevant condition the instructor wants imposed, such as requiring that the student audit a part or the entire course.

4. The GPC considers the recommendation of the course instructor(s). The GPC's decision, together with the written statement from the instructor(s), will be recorded in the student's file.

### 7.7 Annual Student Review – M.S. and Ph.D. students

The annual review of M.S. and Ph.D. student progress has two components: 1) evaluation of performance in achieving academic goals set for the previous year, along with setting of academic goals for the upcoming year, and 2) an administrative review of progress toward meeting programmatic milestones. Detailed instructions will be provided at the time these activities take place each year, typically in June and early July.

The annual setting and evaluation of academic goals will be a collaboration between the student and their advisor. This process is intended to ensure that both parties have a similar understanding of expectations, progress, timeline to graduation, etc. The Graduate School requires that the student, supervisor(s), and academic unit retain copies of these forms, which must also be made available to members of the supervisory committee and university administrators authorized to view student records upon request. SoMAS (e.g., the GPD and GPC) will only get involved in cases where an advisor and student cannot come to an agreement or when student performance is judged less than satisfactory.

In cases where the student has missed an established progress report deadline and has not responded within 4 weeks after being contacted, the report may be completed in the student's absence, and progress may be judged unsatisfactory. A first overall unsatisfactory report must lead to a follow-up progress tracking meeting, not sooner than 4 months after the first report and not later than 6 months after the first report. Failure to meet overall objectives on two Reports (not necessarily successive) constitutes unsatisfactory progress towards the degree and, if recommended by the academic unit, the student will be withdrawn from the University.

During the administrative review, each student is responsible for checking the accuracy of the information contained in their progress report, submitting a request to update their approved course plan if needed, and for correcting any errors they find (the bureaucracy is far from perfect, and it can be a problem getting things fixed at the last minute pre-graduation; be proactive!). This includes checking your unofficial transcripts after each semester to confirm your grades are posted and all incompletes are satisfied. The Graduate School does not allow any incomplete grades in an application to graduate.

### 7.8 Changing One's Advisor

While generally discouraged, circumstances occasionally arise that lead to a student changing advisors. Those circumstances include, but are not limited to, a project not working, lack of funding, or personality conflicts. Separating from your initial advisor should be done by mutual agreement between you and your advisor, and should not be done until a new advisor has agreed to accept you into their lab. If all parties are in agreement, email the "Advisor Change" form (Forms folder on your Orientation flash drive) to Ginny Clancy in the Educational Programs Office. The GPD should be notified of the change as well.

### 7.9 Admission to the Ph.D. Program from the SoMAS M.S. Program

Normally students admitted to the M.S. program will complete the M.S. degree before being considered for admission to the Ph.D. program (note that a full application via the regular Slate process is required). Occasionally, students admitted to the M.S. program demonstrate such exceptional capability in scholarship, motivation, and diligence in the discharge of their duties and a clear sense of direction during their first year that they may be encouraged to consider switching to the Ph.D. program before completing the M.S. With support of their advisor, such students may apply to the Graduate Admissions Committee for admission to the Ph.D. program. If accepted, these students would bypass the earning of the M.S. degree and instead continue directly for the Ph.D. degree after completing a 'change of level' form on the Grad School webpage. Bypassing the completion of the M.S. degree is unlikely to be permitted if a student has less than a B average in the foundation courses or difficulty with other requirements. SoMAS M.S. students who wish to bypass the M.S. degree and switch to the Ph.D. program must apply by submitting a statement indicating their intent, identify their prospective Ph.D. thesis advisor, and briefly describe their proposed Ph.D. thesis topic. They must also submit two letters of support from SoMAS faculty, one of whom must be willing to serve as Advisor. The ability of the advisor to provide financial support to the student will be taken into consideration.

### 7.10 Master of Philosophy

A Ph.D. student who has advanced to Candidacy (G5) but is unable to complete the dissertation may apply to graduate instead with a Master of Philosophy degree.

# 7.11 Advanced Graduate Certificates

Stony Brook University offers a number of Advanced Graduate Certificates, which are focused curricula usually requiring 12 to 15 credits, that may be useful additional credentials for SoMAS M.A., M.S., and Ph.D. students. Examples include STRIDE, Science Communication, and Geospatial Sciences Graduate Certificates. For M.S. and Ph.D. students with Graduate Tuition Scholarships, SoMAS is willing to allow the tuition scholarship to cover certificate courses (but will not to extend the Graduate Tuition Scholarship beyond the 3-year limit for M.S. students).

The courses themselves may or may not be able to count as Specialty courses; this will depend on each students' research interests and be considered as part of the proposed individual curriculum. Because the advisor is generally providing financial support, they must approve a student enrolling in a secondary degree program such as an Advanced Graduate Certificate.

### 7.12 Artificial Intelligence

Policies around the use of Artificial Intelligence (e.g., ChatGPT) in education, research, grant writing, grant reviewing, and many other aspects of the work we do at SoMAS are evolving rapidly. Pay careful attention to policies articulated in each setting, and if the rules are unclear to you, ask questions about permitted uses.

### 7.13 Other Policies

There are many other SoMAS-related policies, but they tend to apply to a relatively narrow range of students. Such policies address things like the SoMAS Research Diving, SoMAS Ship Safety and Use, *etc*. Please search the SoMAS web page or consult with appropriate faculty for more information.

# 8 Financial Matters

Financial support for graduate students comes primarily from three sources: 1) teaching and graduate assistantships (TAs and GAs) from the university, 2) research assistantships (RAs) from grants and contracts held by faculty members, and 3) fellowships and scholarships. Students must be registered full-time or obtain an approved under-load (available to M.S. students only) to receive support; some fellowships are exceptions to this rule.

### 8.1 <u>Teaching Assistantships (TAs) and Graduate Assistantships (GAs)</u>

Students who perform teaching-related duties are assigned TAs, and students who provide other services are assigned GAs. Teaching Assistantships are generally only available for fall and spring semesters when university classes are in session. Most TA support for SoMAS is dedicated to first-year students in the M.S. and Ph.D. programs. Occasionally, and certainly not always, there are some additional TAs available for continuing M.S. and Ph.D. students in need of financial support. The continuing support TA lines are highly limited, if available at all, in any given semester. They are awarded at the discretion of SoMAS based on the availability of funds and generally only available to previously-funded students in good standing.

# 8.2 <u>Research Assistantships (RAs)</u>

Support for M.S. and Ph.D. students after their first year (usually the end of the spring semester) is expected to come from research grants of SoMAS faculty. Grants support the work of a particular faculty member where money has been budgeted to hire students to carry out parts of the proposed research. Research Assistantships can be awarded during the academic year and over the summer. All such awards are at the discretion of the principal investigator (faculty member running the project). A student may be required to do work that is not directly related to the student's own research when supported by an RA. Requests for RA support should be made directly to the principal investigator responsible for the grant or contract. Students should consider the ability of a faculty member to provide support when choosing an advisor.

There are minor differences in the health insurance available to TA/GAs versus RAs. We try to minimize inconveniences associated with switching from one type of support to the other, but some problems are unavoidable. If you anticipate needing any medical assistance when you are about to switch from one type of support to another, you should make sure you understand the differences, by contacting the Benefits unit of Human Resources.

# 8.3 Fellowships and Scholarships

Some students are supported by university or external fellowships, and all students are encouraged to practice their writing and fund-raising skills by applying to whatever fellowship opportunities they can. Fellowships are usually competitive and awarded based on a student's research or academic performance - winning one is a source of prestige and a good addition to your academic resume or curriculum vitae. Information about some available fellowships and scholarships can be found on the internal (Intranet) portion of the SoMAS web site and at the Graduate School web site. You should look into the following programs for fellowship examples and opportunities: the National Science Foundation Graduate Research Fellowship, the Environmental Protection Agency STAR Fellowship through the National Center for Environmental Research, the Office of Naval Research, and the Long Island Sound Fellowship. Scientific societies, private clubs, museum associations and similar groups often have small grant programs that your research idea might be perfect for.

There are SoMAS-specific fellowship and scholarship opportunities as well, and requests for applications are sent out annually via email to students:

- J. R. Schubel Fellowship this fellowship provides an annual stipend supplement for SoMAS graduate students committed to translating science into forms accessible to the public and/or inform public policy. Schubel Fellows will serve as "ambassadors" for SoMAS in its mission to employ scientific research to address environmental problems that confront society.
- *Liblit Scholarship* this scholarship supports M.S. and Ph.D. students working the field of waste management and/or marine, terrestrial, or atmospheric pollution.
- *Pikitch Family Endowed Student Award* this award is open to M.S. and Ph.D. students who have demonstrated outstanding research proposals and a commitment to environmental conservation.
- Sigma Xi Awards Stony Brook's chapter of Sigma Xi, a scientific honor society, sponsors several awards. The Excellence in Research Award provides students with a one-year membership in Sigma Xi. The Grants in Aid of Research Award provides up to \$1000 to exceptional students. Email announcements about these awards are usually sent to students each year.

#### 8.4 Working Hours

Your graduate education is your responsibility – you are shifting from pedagogy (children's learning) to andragogy (adults learning) to heutagogy (self-directed learning). Most people find graduate school to be notably more demanding that a full-time (forty hours per week) job. Breaks between semesters are no longer automatic time off; in fact, you will find that breaks between semesters are often your best opportunity to focus on lab work. Absences of more than a week, even between semesters or during the summer, should be discussed and agreed upon with your counselor or advisor as far in advance as possible.

All assistantships (TAs, RAs, and GAs) require performance of services. The Graduate School has stated that no assistantship may require more than twenty hours per week, but the assistantship can require you to work up to the full twenty hours per week. The work you do for your own courses and thesis research is in addition to your TA, RA, or GA commitment. If you are not yet in the habit, keeping track of the time you spend on each activity can be very helpful in leaning to balance all these commitments.

#### 8.5 <u>Summer Work at SoMAS</u>

All students are expected to continue their independent study and research during the summer. Summer support is almost entirely derived from research grants – ask your counselor or advisor about what sort of summer support is likely to be available. Some jobs may also be available that pay hourly wages.

### 8.6 Graduate Tuition Scholarships

Students receiving stipend support (as TA, RA, or GA) may be eligible for Graduate Tuition Scholarships (GTS). Students in the MCP program are not eligible for a GTS. United States citizens receiving a GTS are required to apply to become New York State residents during their first year of study to minimize tuition costs, and GTS beyond the first year will only cover tuition at the in-state tuition rate. Please refer to the Student Accounts webpage for all NYS Residency Requirements. Students not making appropriate degree progress may lose their GTS. Students are ultimately responsible for paying their own tuition in cases where departmental funds are insufficient to provide full tuition scholarships for all students. Tuition scholarships may not be used for tuition for winter or summer session courses.

The duration of GTS is limited to 3 years for M.S. students, and to three years for Ph.D. students who have not advanced to candidacy. Extensions must be requested from the GPC.

#### 8.7 Journalism (JRN) and other courses outside SoMAS

Unless a course from outside SoMAS is already listed as an approved option (or required course), M.S. and Ph.D. students must have the permission of both their advisor and the GPD to enroll (email including both is a good way to approach that). Permission of the instructor may also be required. OAE classes that are required are covered.

There are limitations on non-SoMAS courses; for example, JRN courses are not generally acceptable as Specialty courses for M.S. and Ph.D. students. Courses outside SoMAS can't be taken as an 'overload' by students with GTS - you must keep your total credits to the regular limit. Ph.D. students cannot enroll in JRN courses (or anything other than MAR 699) after advancing to candidacy. Courses outside SoMAS will be covered by the GTS as long as all other conditions are met. OAE courses have special exception to this rule, once approved.

#### 8.8 Outside Employment

Graduate School policies govern on-campus employment. Only full-time students may have TA, RA, or GA support, and cannot have more than one full Assistantship at a time. Fellowships and scholarships may carry special restrictions on other employment. All international students are governed by Visa and Immigration regulations that limit total employment of F-1 students to no more than twenty hours per week when classes are in session.

You should discuss in advance with your counselor or advisor if you wish to seek employment in addition to your assistantship, whether on- or off-campus, and you must work with the Dean's office to ensure your paperwork is properly adjusted so that you are not in violation of any rules. Any outside employment must not interfere with your responsibilities as a full-time student or as a TA, RA, or GA. The time you spend at another job will likely lengthen the time it takes for you to complete your degree.

### 8.9 Travel Awards

There are a number of awards available to support student travel for which you can apply:

- Marine Conservation and Policy Foreign Travel Award students in the MCP program taking a SoMAS international field course or embarking on an approved international internship may apply for travel awards of \$1000 to help reduce costs. Students may only receive one foreign travel award during their tenure at SoMAS.
- SoMAS Conference Travel Award SoMAS graduate students can apply for support to reduce the costs of attending scientific meetings. Applications are solicited twice a year. Students requesting aid will need to provide detailed information such as the name of the meeting, location, dates, and the abstract of the planned presentation. The award will be up to \$350, and is subject to funding availability. Students can re-apply if not successful the first time, but are only eligible to receive the award once during their degree program.
- Graduate Student Organization Travel Fund (Research Access Program) Graduate students can apply for travel funds from the Research Access Program supported by the GSO. Up to \$350 may be awarded to students presenting a paper, poster, or talk at a conference or meeting. You must be a registered graduate student and have paid your activity fee to be eligible. Currently, students are eligible to receive this award once per year.
- Sigma Xi Award Travel Award This award provides up to \$250 in travel expenses for students to attend meetings and conferences.

# 8.10 Additional General Financial Information

Additional information about tuition, fees, and Stony Brook's financial aid system can be found in the Graduate Bulletin and on Stony Brook University web pages. Students wishing to apply for financial aid must submit the Free Application for Federal Student Aid (FAFSA) form as soon as possible each calendar year. Students should follow up with the Financial Aid Office on main campus once eligibility for grants, work study, or student loans is determined.

# 9 Practical Stuff

This section covers miscellaneous information that you will still hopefully find useful. Like some of the other sections, this is not an all-inclusive list, but tries to address the more important and common issues. A more comprehensive version of many of the items below, and more, can be found in the <u>SoMAS Operations Manual</u> (click on the link to access the manual).

### 9.1 <u>Student Offices</u>

All new students are assigned an office. Please remember that SoMAS student offices are shared space and are intended for academic purposes only; they should not be used as temporary living quarters, left dirty with food/drink around that will attract insects, or anything else that might disturb your office mates. Students abusing these privileges risk losing their office. That said, with the agreement of all officemates, there is flexibility to personalize student offices and make them as comfortable and supportive of everyone's work needs as possible. If you are having problems with your office mates that you cannot resolve amongst yourselves, or wish to change offices for other reasons, please talk to Christina Fink in the Educational Programs Office. Office assignments can be changed when necessary, but do not change offices on your own – it is important that SoMAS knows where you are located and the proper recoding of keys is critical for everyone's safety.

# 9.2 Building and Room Keys

Requests for building and room keys (including your office) must be endorsed by the Educational Programs Office (Christina Fink) for office keys, or your advisor for lab keys. The university requires a \$10 deposit per key when you pick up your keys. Your deposit may be paid by cash or check, and will be returned to you when you return your keys. This process is completed in the Dean's office with Steve Ortega once the office is assigned.

Note that building keys (for exterior doors) are in the process of phasing out; soon your ID card will be required to gain access to any main-campus SoMAS building outside regular building hours.

# 9.3 <u>Smoking (the Lack Thereof)</u>

Stony Brook University prohibits smoking on campus, including any campus building and offices, as well as outside on university grounds.

# 9.4 Parking

Student parking in the lots adjacent to Endeavour, Challenger, Discovery, and Dana Halls is illegal unless your vehicle has a valid Faculty/Staff (Red) parking permit or a special one-day permit. M.S. and Ph.D. Students supported on a TA, RA, or GA are eligible to apply for Red

Faculty/ Staff parking permits. All vehicles without appropriate parking permits are subject to ticketing and/or towing at your expense between the hours of 7 a.m. and 4 p.m., Monday through Friday. Please be aware that campus tickets are official New York State tickets and not a "fake" university ticket that you can ignore.

# 9.5 <u>Campus Mail</u>

Student mailboxes are located in the Endeavour Hall mailroom. Please check your mailbox (or have someone check for you if you are not on campus regularly) at least once per weekday – sometimes it is the only way we can get in touch with you.

# 9.6 Copiers and Fax Machines

You may use SoMAS copiers and fax machines when such use has been endorsed by your advisor or supervisor; an account code will be needed for use. You will be provided a copier code dedicated to the course if you need to use SoMAS copiers as a TA for a SoMAS course. Most SoMAS copiers can also scan to a portable document format (PDF) that can be directly emailed to you.

# 9.7 <u>SOLAR</u>

The university's SOLAR system is used to access all sorts of information, including your university records, payroll, correct mailing address and other university-related financial information, and is used to register for classes. Please keep your personal information (e.g., mailing address, phone numbers, emergency contacts, etc.) on SOLAR updated as necessary. You will need your Stony Brook Identification Number to login to SOLAR.

# 9.8 <u>Two-factor authentication (Duo)</u>

Stony Brook University has implemented two-factor security for most electronic resources. <u>Learn how to install and enroll into DUO Mobile</u> (have your mobile phone or device ready).

To enroll a second device, visit the <u>Self-Service portal</u>

More about two-factor authentication: Guide FAQs

For instructions on how to use DUO when you are <u>in an area without Internet access</u>, please see <u>these instructions</u> from DoIT.

# 9.9 Email and Email Use

You should already have a functional Stony Brook University email address. Your email will likely take the form of *firstname.lastname@stonybrook.edu*, although variations on this might exist depending upon how common your name is. You will need your NetID and password to login to your Stony Brook email account and many other SBU electronic resources.

Your NetID and password can be found in SOLAR under the "Security and Personal Data" section. You have a 25 GB email quota.

Email is the primary way that we communicate with students, and it is your responsibility to make sure you get email sent to students. You should check your email at least once per day. If you decide to not use your Stony Brook email account as your primary email account, you must forward your Stony Brook email to whatever email address you regularly check. All official correspondence will be sent to your SBU address only.

Your Stony Brook email account should only be used for official Stony Brook business as use of the Stony Brook email address implies an official action or endorsement by the university. You should not use your Stony Brook email address for personal business, and never use it to advocate for any kind of position. You should maintain a personal email account (you likely already have at least one) for personal business. The university has also specifically instructed that Stony Brook email addresses (including the SoMAS\_All\_Hands address) may not be used for housing requests or offerings. If you have questions about appropriate use, please contact your advisor or the SoMAS Operations Manual.

#### 9.10 SoMAS Logos, University Logos, and Self-Made Letterhead

The use of university logos, including SoMAS logos, is governed by rules similar to those for Stony Brook email. Letterhead, even if self-made, that incorporates university logos is for SoMAS business only. You should not include these logos for your personal use. SoMAS and university logos included as letterhead may be used for correspondence related to your thesis work such as submitting a manuscript, applying for a fellowship or job, or corresponding with a colleague about your work. Be sure to state that you are a graduate student when using official letterhead, and never use it for personal business or advocating any kind of position. Use of the Stony Brook University name or logo, or the SoMAS name or logo, implies an official action or endorsement by the university. If you have questions about appropriate use, please contact your advisor or the Dean's office.

#### 9.11 Libraries

There are multiple libraries on campus, but the two you are most likely to use are the Marine and Atmospheric Sciences Information Center (MASIC) located in Challenger Hall, and the Science and Engineering Library located in the Frank Melville Jr. Memorial Library on main campus. The latter houses most journals and texts of interest to SoMAS students that are not already housed in MASIC. The university maintains access to many scientific databases and electronic journals that can be accessed through the internet with your NetID. The university's inter-library loan (ILL) system can be used to obtain books, reports, and copies of articles not held or accessible through the university libraries.

MASIC has been closed since the start of the pandemic and it is not clear whether or when normal operations will resume. MASIC contains a large collection of journals related to oceanography, environmental science, and biology, reference books and reports, world-wide nautical charts, doctoral dissertations and masters' theses, and where upon completion yours will be added along with other SoMAS-related materials. Computers within MASIC can connect to all electronic resources available at Stony Brook University. MASIC also contains a very nice reading room with large tables that can be used as study space.

A few other campus libraries contain materials of potential interest to SoMAS students, including the Math, Astronomy and Physics Library, and the Chemistry Library. A schedule of each library's hours of operation and maps showing their locations are available Stony Brook University Libraries web pages.

### 9.12 <u>Software</u>

Microsoft Office and Symantec Antivirus are available to every registered student for free. The latest version of Microsoft Office for Windows or Mac can be downloaded using your Stonybrook.edu email address. Please contact Mark Lang at SoMAS for more information.

A variety of other software including EndNote, SPSS, Mathematica, and Matlab is accessible though the university's SoftWeb site (<u>softweb.cc.stonybrook.edu</u>). You will need NetID and password to login.

### 9.13 Machine Shop, Woodworking Shop, and Power Tools

SoMAS has machine and woodworking shops where custom research equipment can be made. Power tools are also available. Use of these facilities must be approved and supervised. See the SoMAS Building Manager, Willa Schultz for more information.

#### 9.14 SoMAS Vehicles

SoMAS owns several vehicles that may be rented for research-related work. SoMAS also owns vans for transporting students to course-related field sites. Please contact the SoMAS Building Manager, Willa Schultz for SoMAS vehicle driving requirements.