MIT-WHOI Joint Program Teaching Development Resources

Navigation

Tl;dr: Here's a diagram summarizing the types of teaching development opportunities covered in this document. Both MIT and WHOI-based resources are covered in each category. If you already know what kind of teaching development experience you are looking for, use the links in the table of contents under the diagram to choose your own adventure! If you want more guidance about why or how to engage with teaching development opportunities in grad school, read the intro sections below.
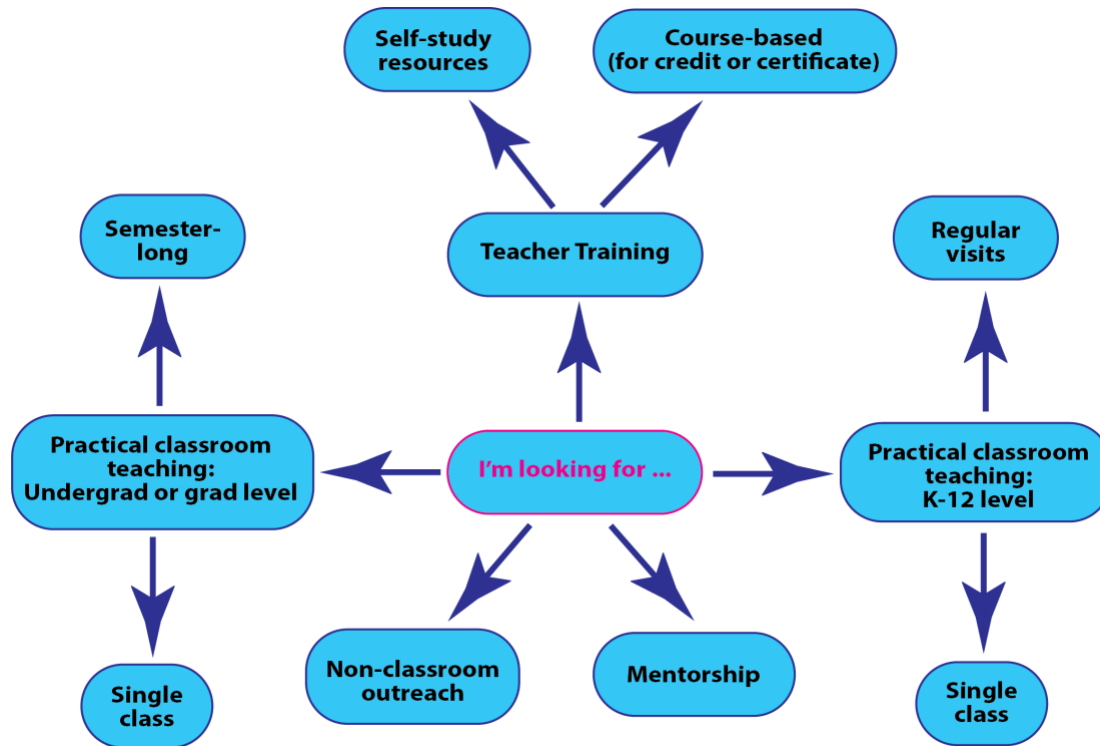

Table of Contents

Introduction: Teaching Development in the MIT-WHOI Joint Program

The purpose of this document is to provide MIT-WHOI Joint Program (JP) students with information about teacher training programs and practical teaching opportunities that JP students can participate in during their tenure as grad students. The information in this document has been compiled by students in order to publicize opportunities that newer students may not be aware of. For each opportunity, descriptions, contacts, locations (MIT vs WHOI) and information about how to get started are included. These opportunities can change over time, so this document should be regularly reviewed and updated, ideally by a Teaching Development Fellow representing the JP, a BIG representative, or APO. See version history at the end of the document. Recognizing that students have more or less time available to dedicate to teaching at different points in their grad student careers (ex: it's hard to do anything pre-Generals! Don't beat yourself up about it!), this document also notes whether opportunities entail a low or high time commitment. An example of a low time commitment activity is participating in a guest class at a local school, which might require a few hours to plan a lesson plus the time of the class itself and any transportation. An example of a high time commitment activity is taking, TA-ing, or teaching a semester-long course. For high time commitment activities, students should talk about their plans with their advisors before jumping in.

Should I take the time to invest in teaching skills?
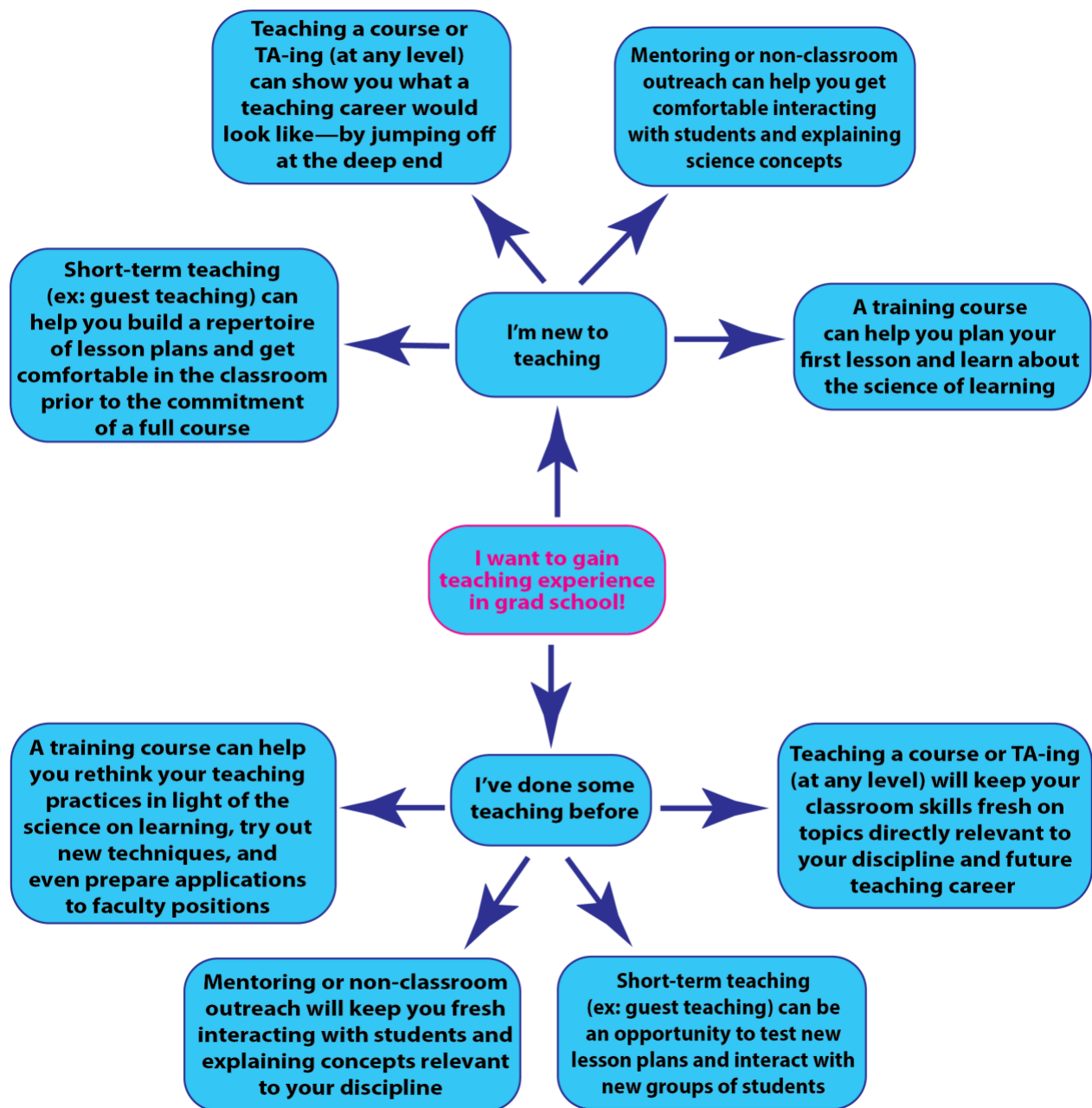
This depends on your career goals and interests! If you envision yourself in a faculty, education, or outreach career, taking the time to develop teaching skills will better prepare you for the day-to-day work of teaching that you will be doing after grad school. A proven track record of teaching will also make you a stronger job applicant. However, even if you are unsure about

your future goals, setting aside some time to gain teaching skills can be helpful. No matter what career you end up in, there's a good chance that you'll be responsible for mentoring and teaching more junior scientists, communicating scientific ideas to a new audience, or participating in some kind of science outreach. Gaining teaching skills can only help you when that time comes.

How should I get started?

There's no one path to gain teaching skills! Grad school provides opportunities for teacher training, traditional classroom teaching, and other mentoring or outreach that involve working with students at all levels. Different opportunities might be right for you depending on your interests, your comfort level with teaching, and your other grad school obligations. For example, TA-ing will have a lower learning curve for an experienced classroom teacher, while new teachers may want to get their feet wet through lower-commitment practical teaching opportunities such as guest-teaching a single class session or taking a teacher training course. Teacher training courses, however, also have a lot to offer experienced teachers, as learning about the science on learning can lead you to rethink your teaching practice in order to design a more effective and inclusive classroom experience for your students. These courses can also help you prepare teaching statements for applications to faculty positions. At the same time, we all have to balance research obligations and classes when deciding how much time we can devote to teaching, so sometimes we have to compromise on which teaching activities to participate in, and when. For example, if you want to take, TA, or teach a semester-long course, advance planning with your advisor can help you make sure that you have the time to focus on teaching development during that critical semester while still meeting your research goals. The diagram below shows some of the benefits that different opportunities for teacher development offer depending on your experience.

The key point to remember is that teaching is just as much of a challenge and requires developing just as many new skills as research! Just like research, it's not something that any of us are innately good or bad at—training and practice help all of us improve. Reading about the science on learning, discussing new ideas with fellow teachers, designing lesson plans, and practicing hands-on teaching will all make you a more confident and effective teacher in the JP and beyond!

Teaching a course or TA-ing (at any level) can show you what a teaching career would look like—by jumping off at the deep end

Mentoring or non-classroom outreach can help you get comfortable interacting with students and explaining science concepts

Short-term teaching (ex: guest teaching) can help you build a repertoire of lesson plans and get comfortable in the classroom prior to the commitment of a full course

I'm new to teaching

A training course can help you plan your first lesson and learn about the science of learning

I want to gain teaching experience in grad school!

A training course can help you rethink your teaching practices in light of the science on learning, try out new techniques, and even prepare applications to faculty positions

I've done some teaching before

Teaching a course or TA-ing (at any level) will keep your classroom skills fresh on topics directly relevant to your discipline and future teaching career

Mentoring or non-classroom outreach will keep you fresh interacting with students and explaining concepts relevant to your discipline

Short-term teaching (ex: guest teaching) can be an opportunity to test new lesson plans and interact with new groups of students

Teacher Training

Are you new to teaching? Do you have some teaching experience but want to improve your skills and make sure your teaching reflects the science on how people learn? Do you know that traditional teaching practices in the sciences often don't create an inclusive environment to support all students and you want to learn how to change that in your own teaching? Do you need to prepare applications for a teaching-related job? Consider applying for the following teacher training courses available to JP students:

12.910 Communicating Ocean Science
WHOI!

This WHOI-based semester-long course has been historically taught by [Lauren Mullineaux](#) and [Anna Michel](#) every other year. It is a seminar style class that meets twice a week and has homework. The goal of the class is train future teachers, with a focus on ocean science, but many of the skills are transferrable to teaching science more generally. It is a discussion-based class with lots of hands-on activities and opportunities to collaborate with classmates. Students read about the science of learning and also have practical teaching opportunities. Requirements of the class include leading guest lessons at both the college level and elementary school level in the Cape Cod area, which can lead to lasting outreach connections with schools like Cape Cod Community College and Mullen Hall Elementary. Previous students have found that the sections on elementary school teaching were surprisingly transferrable to teaching at the undergraduate level. The course also includes professional development, as one assignment is to draft and workshop a teaching statement which can later be used in applications to faculty positions. However, this course does not offer a teaching certificate. This course is open to all JP students and you can register for it just as you would register for any other class.

MIT Grad Student Teaching Tracks
MIT, WHOI, and (in some cases) Virtual! Contact [Ben Hansberry](#) at the TLL for details.
The "teaching tracks" are short courses (2-3 weeks long) taught by the MIT Teaching and Learning Lab (TLL). There are four courses in total, offered multiple times through the year (including summer and IAP). If you complete all four courses, you will [earn an MIT Teaching Certificate](#). The courses do not have to be completed in any specific order (with the exception of Microteaching, which must be done after Lesson Planning) and can be completed at ANY time during your tenure as a grad student (i.e., you could complete one track in Year 1, then finish the rest in Year 5). You can also choose to take only one or two if the others don't interest you. The tracks offer less hands-on teaching practice compared to Comm. Ocean Sci. but are a great way for new teachers to develop their first lessons in the company of supportive peers. The tracks are also more focused on undergraduate teaching and include an assignment in which students design a syllabus for a future course they might teach at the college level, which is not a part of Comm. Ocean Sci. Homework for the courses is required and involves substantial reading on the science of learning. The four courses are:

- Lesson Planning: Students draft and workshop a lesson plan on a topic of their choice. *This track is held in person.*
- Microteaching: Students present, workshop, and re-present a short lesson for their classmates. *This track is held in person.*
- Subject Design: Students draft and workshop a syllabus for a course of their choice. *This track is held virtually.*
- Inclusive Teaching: Students develop a plan to create a classroom environment that supports all students. *This track is held in person.*

The Grad Student Teaching Tracks are open to all MIT grad students and are popular, so applications are required for admission and it may take a few rounds of applying to gain a spot. Applications are simple and take about ten minutes in total. Once you have taken one track, your application to future tracks is prioritized. The TLL has begun to offer the in-person Teaching Tracks once a year in person at WHOI for WHOI-based students. The TLL contact for more details is [Ben Hansberry](#). Note that graduates of the Teaching Tracks are ineligible for the

Kaufman Teaching Certificate Program (and vice versa) because these programs have the same curriculum.

Kaufman Teaching Certificate Program (KTCP)
MIT!
The Kaufman Program is a semester-long course taught in person at MIT. It's an accelerated version of the Grad Student Teaching Tracks and contains all of the same material, but in a one-semester course. It is offered both during the semesters and the summer and is fully in person at MIT. Therefore, it is best suited for students who live in Cambridge or who can plan to be on campus at MIT 1-2 times per week. The Kaufman Program is open to all MIT grad students AND post-docs and is popular, so applications are required for admission and it can be difficult to gain a spot. The application is more involved compared to the Teaching Track applications and includes some short essays. For curriculum details, see the section on Grad Student Teaching Tracks. The TLL contact for more details is Ben Hansberry. Note that graduates of the Kaufman Teaching Certificate Program are ineligible for the Teaching Tracks (and vice versa) because these programs have the same curriculum.

MIT Teaching Development Fellowship
MIT and WHOI!
The Teaching Development Fellowship is a year-long appointment to serve as a student ambassador for teaching resources available to grad students. Typically, one fellow is appointed per department. Fellows are expected to dedicate 10 hours per month to their fellowship activities, which include reading about and discussing topics in education with other fellows and leading events to help grad students in their department gain teaching skills. These events might include an alumni panel on teaching careers, a workshop on leading a recitation, and more! Fellows have wide latitude to choose projects that are relevant to their particular departments. Joint Program students may be able to serve as a fellow for their MIT department (ex: EAPS, CEE) or for the JP in general (treating the JP as an "MIT department"). The application process can be competitive and students should find out whether their other fellowships (ex: NSF-GRFP) restrict them from participation before applying. The fellowship comes with $2000 in compensation added onto the student's regular stipend. Students are expected to have completed (or to be almost done with) the Grad Student Teaching Tracks or the Kaufman program before starting the fellowship. The TLL contact for more details is Ben Hansberry.

Lower Commitment Teacher Training Opportunities
MIT and WHOI!
Sometimes you just have to focus on research or classes and can't commit to the teacher training programs described above. Luckily, there are still opportunities to learn about teaching through one-off workshops, seminars, and other events!
- The MIT Teaching and Learning Lab (TLL) runs "TA Days" prior to the start of the fall semester (August) and spring semester (IAP). This is a series of workshops on topics designed to help TAs become more confident and effective teachers for the coming semester. You can choose to attend in person at MIT, remotely, or you can choose just

to access materials on the Canvas site without attending any of the workshops. The contact is [Ben Hansberry](#).

- The [MIT Teaching and Learning Lab](#) (TLL) has a [mailing list](#) you can join to hear about upcoming events, including talks and workshops on the science of teaching and learning, some of which are offered virtually. This is also a good way to keep up to date on application cycles for the Kaufman Program and Grad Student Teaching Tracks

- [Teaching Development Fellows](#) for your MIT department (ex: EAPS, CEE) and for the JP in general lead events that might include teaching workshops, career panels, or seminars. These events are often publicized to the entire department. If you don't know who your TDF is or think you're missing the emails, contact [Ben Hansberry](#) at the TLL.

- The [WHOI Broader Impacts Group (BIG)](#) sometimes sponsors training sessions related to specific outreach opportunities. Contact the current [BIG](#) leadership to learn more. In the past, [Woods Hole Sea Grant](#) Educator [Grace Simpkins](#) has helped to lead some of these training sessions.

- If you work with a lot of data or coding, you may want to join the [Ocean Informatics Working Group Slack workspace](#), where teacher training specific to coding is sometimes offered.

- The MIT Undergraduate Teaching Opportunities Partnership has a [YouTube series](#) of teaching tips.

Practical Teaching Opportunities At The Undergrad & Grad Level

Are you ready to get into the classroom and teach at the undergraduate or graduate level? Or maybe you don't feel ready at all and that's why you want some hands-on experience before applying to faculty positions? Here are some practical teaching opportunities in the JP that might be right for you. Note that some of these opportunities are high commitment (TA-ing or teaching a full guest course) while others are low-commitment (guest-teaching a single class session). If you're new to teaching, starting with a low-commitment opportunity can help you develop skills and prepare to be a more confident and effective teacher for semester-long obligations like TA-ing. Low commitment opportunities are also a good option if you need to allocate most of your time to research or coursework.

Teaching Assistantships
MIT and WHOI

JP students are guaranteed full funding for five years and are not required to TA during their tenure as grad students. This is great when you want to focus on your research! But it also means that students who want to TA may have to proactively seek out TA opportunities. JP students have TA-d for undergraduate classes at MIT and graduate classes at WHOI that are geared towards their fellow classmates. The opportunities available depend on the location (MIT versus WHOI) and the department (Chem, Bio, PO, G&G, AOPE). In general, students who are interested in TA-ing should already have taken and done well in the class they hope to TA for. In general, it's also wise to wait until after your General Exam to TA a course because of the time commitment and because you will have gained more experience in your discipline.

The selection process for TAs is variable. Sometimes faculty actively solicit applications for TA positions in emails to the entire JP or a subset of the JP (ex: all post-generals chem students) qualified to TA the class. APO is trying to make sure that TA positions are advertised as widely as possible so all qualified applicants can apply. Sometimes, however, opportunities to TA are not advertised and positions are filled through informal conversations with the faculty members teaching the class. The timeline varies from months in advance to just before the start of the semester. A short timeline is sometimes the result of the program's minimum enrollment requirements (i.e., a certain number of JP students are required to enroll before a class can have a TA). Due to this uncertainty, it's a good idea for students interested in TA-ing to talk in advance with their advisors, APO, the education coordinator for their discipline, and individual faculty members teaching classes they are interested in to find out about opportunities.

JP classes that have had TAs in the past include:

- 2.681: Environmental Ocean Acoustics
- 7.440: An Introduction to Mathematical Ecology
- 7.470: Biological Oceanography (Annual)
- 12.702: Elements of Modern Oceanography (Has been annual, may change)
- 12.717: Coastal Geomorphology (Alternate years)
- 12.739: Marine Microbiology and Biogeochemistry (Alternate years)
- 12.741: Marine Bioinorganic Chemistry (Alternate years)
- 12.742: Marine Chemistry (Annual)
- 12.744: Marine Isotope Chemistry (Alternate years)
- 12.746: Marine Organic Geochemistry
- 12.747: Modeling, Data Analysis, and Numerical Techniques for Geochemistry
- 12.800: Fluid Dynamics of the Atmosphere and Ocean
- 12.808: Introduction to Observational Physical Oceanography
- 12.850: Computational Ocean Modeling
- 12.860: Climate Variability and Diagnostics

There are many factors that JP students should consider before agreeing to take a TA-ship. These include:
- Have I talked with my advisor and do I have their support to TA?
- What will my responsibilities be (ex: leading recitations, grading, etc)?
- What is the time commitment? Note that TA-ships are funded for a different number of hours per week depending on the enrollment of the class.
- Can I fulfill my research goals while TA-ing?
- Does my funding source (ex: fellowship) allow me to TA?
- How will the faculty of the class support me (ex: providing answer keys for problem sets)?
- Do previous TAs of the class have resources they can share with me?
- How did previous TAs of the class feel about the experience of TA-ing?

- Will I have the opportunity/responsibility of leading a single class session for the course?

There is no one-size-fits-all answers to these questions, so it's a good idea to talk with your advisor, the faculty teaching the class, former TAs, and APO to figure out if TA-ing a particular course is a good fit.

TA-ing can slightly change (increase!) the amount of your stipend (check with APO for up-to-date details). It can also change the source of your income (research assistantship versus teaching assistantship status). There are also some fellowships which require that students do NOT TA. If you are not sure how TA-ing will affect your funding status, or whether an external fellowship would prevent you from TA-ing, you should talk with APO.

JP students have TA-d MIT classes in the past. If you're interested in TA-ing a class at MIT, you should talk with an MIT faculty member or department administrator to learn about the opportunities and rules for TA-ing in the MIT department you are interested in (ex: CEE, EAPS, Bio).

Blue Economy Internship Program
WHOI
The Blue Economy Internship Program, held every spring, brings undergraduate students from Cape Cod Community College (4Cs) and UMass Dartmouth to WHOI for a semester-long research experience in WHOI labs. The program starts with a short course during IAP (January) in which WHOI faculty, post-docs, and grad students lead lessons meant to introduce the undergrad interns to ocean science. The lessons include both a classroom component and hands-on activities or field trips and can be designed to include topics in the grad student's research area. Ideally, the lessons also have clear connections to "the blue economy." For example, some past lessons have focused on wind energy, ocean pollution, and conservation. Students don't have to be research mentors for the interns in order to teach one of the January classes, although mentoring an intern for the semester is another great way to gain teaching skills. The full commitment of participating as a teacher is planning and leading a single class session. The contact for the program is Gretta Serres.

Data Science Café, Slack, and Carpentries Workshops
WHOI
The Ocean Informatics Working Group leads workshops and drop-in "office hour"-type sessions over Slack, in person, and on Zoom on data and coding. Workshops and office hours involve assisting undergrad summer students, JP students, and WHOI staff members. Teaching primarily involves working directly with a single person or small groups on coding and data science, rather than planning lectures. You can join their Slack workspace and follow the #instructors channel to find out about opportunities to teach and participate in teacher training workshops with Carpentries. WHOI often secures funding to train one or more students formally as Carpentries instructors. The contact is Brett Longworth.

Summer Math Refresher
WHOI

This WHOI-based non-credit course is taught each summer for incoming first-year grad students. It has been taught in-person, remotely, and hybrid in previous years. The purpose of the course is to shake the rust off skills students have seen in previous courses and may need to refresh for research and coursework. Each class is taught by a different grad student instructor and focuses on a different area of math (ex: Algebra, Linear Algebra, Common Derivatives and Integrals, Complex Numbers, MATLAB, Partial Differential Equations (PDEs), Signal Processing and Time Series Analysis, Non-Homogenous PDE, Ordinary Differential Equations, Probability Statistics, Quasi-Linear PDEs, Scaling and Nondimensionalization, Trig). Teaching in the course involves planning a lesson on your area of math or coding, developing practice problems, and teaching a single class session. The program is coordinated by JP students each year and the more permanent APO contact is Meredith Bittrich.

JP Network Summer Course

JP Network is a short, not-for-credit summer course designed to prepare incoming students in the MIT-WHOI Joint Program for graduate study and to integrate them into the JP support network. The scholarly focus is on mentoring, with special attention to inclusion, access, and opportunity. More senior JP students can volunteer to guest teach a lesson on the challenges and opportunities of grad student life. The contact is Lauren Mullineaux.

External Guest Teaching
MIT, WHOI, and Virtual!

If you want to get practice teaching, leading a class (either a single lesson or a full course) as a guest teacher is a great way to go! Guest teaching can be low commitment (a single class) or high commitment (frequent visits to the same class or even serving as the primary instructor of the course). The best way to find out about these opportunities is to reach out to teachers or departments at institutions that might be interested in having an ocean scientist talk with their students about contemporary research in ocean science or are looking for a short-term instructor in your discipline. It helps if you have a preexisting connection to the school or can have a JP faculty member with contacts at the school introduce you. If you're not sure where to start, talk to APO. students have taught guest classes at many undergraduate institutions including:

- Sea Education Association (SEA)
- Cape Cod Community College (4Cs)
- Bridgewater State University

Note that if you are interested in a long-term commitment guest teaching at another institution (a whole course rather than a few individual class sessions), you should talk with your advisor and APO first, as there may be conflict of commitment issues or issues with your funding source.

Mentoring Undergrad Researchers
MIT and WHOI!

Mentoring a student research project through the WHOI SSF, PEP, CC-CREW, or Blue Economy programs, or the MIT UROP program is not the same as classroom teaching, but can provide hands-on experience working with undergrads who are learning research concepts for the first time. This means helping students think through new ideas, teaching mini-lessons on concepts related to your research, and teaching the scientific process, all of which are transferrable skills to classroom teaching. The summer research programs often culminate in poster sessions or oral presentations at WHOI that JP mentors might help their mentees prepare for. JP students don't typically have control over when an undergrad will be working in their lab—that's a decision made by the PI of the lab and the undergrad research program administrators. But you can let your advisor know that you are interested in mentoring an undergrad student in lab if and when the opportunity arises, or you can reach out to program administrators (Kama Thieler for WHOI programs) to find out about opportunities to interact with undergrads in other ways while they are on campus.

In particular, the Partnership Education Program (PEP) often has opportunities for Joint Program students to participate in program mentoring or organization. Each summer, there is an opportunity to attend and give feedback on PEP student presentations. PEP organizers are also interested in partnering with Joint Program students who can serve as mentors or tutors for PEP participants, in particular for help with computer programming. A short coding course will be offered each summer to PEP students in the future, for which Joint Program students can volunteer to serve as an instructor. Contacting BIG can put you in touch with Broader Impacts Group organizers interfacing with PEP.

Practical Teaching Opportunities At The K-12 Level

Maybe your goal is to teach at the K-12 level, or maybe you want outreach at the K-12 level to be part of your future career in academia, industry, or policy. Here are some practical teaching opportunities that might be right for you:

External Guest Teaching
MIT, WHOI, and Virtual!

If you want to get practice teaching, leading a class as a guest teacher is a great way to go! Luckily, there are many one-off opportunities to teach guest lessons publicized by the Broader Impacts Group (BIG) and the WHOI Committee for Diversity, Equity, and Inclusion (CDEI). Note that many of the partnerships with schools outside of Woods Hole listed below were specifically created to improve access to ocean science for underserved students. You can join the BIG mailing list to stay up to date, but some longstanding opportunities include:

- Connect with K-12 classrooms around the world through Skype A Scientist.
- Volunteer for the Woods Hole Sea Grant Girls in Science summer program. The contact is Grace Simpkins.
- The Committee for Diversity, Equity, and Inclusion (CDEI) leads a program in the fall and spring in collaboration with teachers from Keith Middle School in New Bedford and New Heights Charter School in Brockton. This involves teaching a lesson at the school, either a few times over the course of one day at Keith, or over the course of a two-day block

schedule at New Heights. Reach out to the CDEI or to BIG if interested in getting involved.

- The Penikese Island Girls Summer Camp seeks young woman and nonbinary scientists to run science lessons for their camp. It is usually a full-day commitment, but they provide transportation to/from Penikese Island and lunch. The contact is Kendra Buresch.
- Sturgis Charter School occasionally seeks volunteers to talk about careers in science or otherwise. Contact Joanne Tromp to learn more.
- The MIT Educational Studies Program (ESP) is an opportunity to develop and lead classes on any subject for middle school and high school students, in collaboration with K-12 teachers. You can volunteer to teach or help organize at an ESP event here.

BIG, Woods Hole Sea Grant, and the CDEI have compiled databases of lesson plans and demonstrations of how to lead K-12 lessons on ocean science concepts, so there's no need reinvent the wheel! Using a preexisting lesson plan can lower the activation energy to teaching a K-12 guest class. Over time, as you gain confidence as a teacher, you may start making changes or developing new lesson plans. Reach out to the current student leadership at BIG for access to the lesson plan database.

Outreach Outside of the Classroom
MIT, WHOI, and Virtual!

Some outreach opportunities don't involve classroom teaching, but they still involve interacting with students, answering questions, explaining scientific concepts, and teaching the scientific method, all of which are transferrable to classroom teaching. Many of these opportunities are also publicized by the Broader Impacts Group (BIG). You can join their mailing list to stay up to date, but some longstanding opportunities are listed below. Note that some of the audiences for these outreach opportunities are not actually K-12 students—they might be adults as well. But because this outreach should be at a level accessible to non-scientists without specialized training, we are including these opportunities in the K-12 section:

- Volunteer for Zephyr Marine, an organization that offer middle and high school ocean science education through hands-on oceanographic research "cruises" out of Woods Hole, sessions in the Redfield Aquarium Room, and WHOI Dock tours. The contact is Rob Reynolds. There is a Google signup page here.
- Keith Middle School in New Bedford is very receptive to collaboration with WHOI students. Past activities have included a fall STEAM night in December. Students plan and execute science projects and demonstrations as part of their quarterly content system at the school. There is an opportunity to mentor students who are embarking on projects. BIG has in the past tabled at the event, showing off WHOI research and interacting one-on-one with students and community members. The contacts are Dave Mather and Jeanine Cambria.
- The Wareham Elementary School's STEAM teacher has previously sought scientists to come participate in STEAM night, which provides hands-on activities and learning stations to students and families. The contact is Elizabeth Hayes.

- Mashpee Middle-High School has previously requested physics subject area tutors. The contact is [Consuelo Carroll](#).
- Science Fairs at K-12 schools
    - Lawrence School Science Fair: Participation involves guiding students through the process of making their science fair projects, typically in the winter, and judging the science fair (typically around early March on a school day morning). The contact is [Carmela Mayeski](#).
    - Mashpee Middle-High School: Participation involves judging the fair (primarily high schoolers with some middle school student project. This is typically 5-7pm on an evening in February. The contact is [Laishona Vitelli](#).
    - The [Massachusetts Science and Engineering Fair](#) offers middle and high school level science fair options, with opportunities to mentor and judge. The fairs are held in May.
- MIT Introduction to Technology Engineering and Science ([MITES](#)) is a program that provides middle and high school students in the Boston area with exposure to career pathways in STEM. You can join the volunteer list [here](#).

Acknowledgements and Version History

This document was drafted by [Danielle Haas Freeman](#) in Spring 2023, with the assistance of Ann Tarrant (APO), Serena Sung-Clarke (BIG) and Arianna Krinos (BIG), as well as anonymous contributions from members of the student body. The document can be found on the MIT-WHOI JP website behind password protection. While we hope that this document will be distributed widely among JP students, this document should not be open to the general public out of respect for the external contacts, especially at local schools, included here. All contacts have given permission for us to use their email addresses in this document for the use of JP students interested teaching opportunities.

Most recent updates: DHF Spring 2023