

## Guidelines for Pre-Generals Students

This is meant to supplement the JPBO handbook for students and advisors. The goal is to provide some additional tips and explanation to guide you through the process.

### Incoming/First-Year Students:

**What you can expect from JCBO:** You will meet with JCBO at the start of your first year for approval of your curriculum. Beyond this, you are encouraged to meet with the education coordinator to discuss any concerns or problems. There likely will be no additional formal interaction with JCBO regarding program requirements during the remainder of your first year.

**Forming the Academic Advisory Committee (“AAC,” Handbook Section 3.2):** The handbook indicates that students should form their AAC during the summer before the first year. In practice, we recognize that sometimes students have difficulty identifying appropriate members of the AAC before they have had a chance to meet many faculty members. For example, students with WHOI-based advisors sometimes need additional time to identify an MIT-based faculty member. In this case, we ask that the students spend time during the summer and first semester talking with different faculty members and finding a good fit. In this case, it can be very useful to draw on the MIT-based members of JCBO to get additional advice regarding course selection.

**Choosing classes:** Students design their curriculum in consultation with their advisor and AAC. Our curriculum requirements are very flexible (Handbook Section 4). As a recommendation, the first 1-2 years are typically when students have the most time to devote to classes. This is often the best time to take demanding classes in science and other quantitative subjects. For WHOI-based students, this is also the best time to take advantage of the fantastic classes available at MIT and Harvard. Students often wish to also take classes in complementary topics such as communication, teaching, policy and writing. Sometimes these classes can fit into the first year or two. Sometimes these classes can be deferred until later in the program, where they provide a nice balance to the day-to-day focus on research. Advisors and/or JCBO may encourage students to focus heavily on science/math/engineering during the initial semesters. It’s useful to know that there is often more flexibility to explore other topics after students have passed their thesis proposal defense and demonstrated that they are making solid progress on their thesis research.

JCBO has provided some examples of recommended curricular tracks. These are guidelines and should be considered as living documents. If you have taken classes that you think would be useful additions to this document, please notify the Education Coordinator. We can also provide a list of what courses students have taken, and strongly suggest that they talk with senior students to identify appropriate classes, or to an MIT member of JCBO if they do not have an MIT AAC committee member.

**Curriculum approval by JCBO:** During the first year, students present their proposed curriculum for approval by JCBO. The curriculum approval meeting is not intended to be “scary.” It’s an opportunity for the members of JCBO to provide additional suggestions and to help students resolve any difficulties in selecting classes.

Students may make changes to their proposed curriculum in consultation with their advisor AAC. Students should notify JCBO about changes to the curriculum.

**Research and classwork balance:** It's important to talk with your advisor regarding expectations for research during your first year (and of course these discussions will continue throughout your time in the program). Particularly during the first semester, it may be difficult to assess how much time you will need to devote to coursework. In addition, classes may become more demanding as the semester progresses. The most important thing is to maintain an open dialog with your advisor about the time you are able to put toward research.

### Second-Year Students:

**What you can expect from JCBO:** As students enter their second year (and in subsequent years), their progress is evaluated by their advisor and by JCBO. This is an opportunity for the members of JCBO to help to address any problems that students may be experiencing. Second year students are encouraged to attend the all-student meeting as a part of the evaluation process, which has traditionally occurred in August. This is a good time to bring up ideas and concerns. Shortly after the meeting (usually within a week), students and advisors are sent a memo that summarizes the discussion during this evaluation. Throughout the year, the Education Coordinator will monitor your completion of milestones within the program ("key deadlines"), as summarized below.

### **Here is an overview of key deadlines:**

Notify Ed Coordinator and JCBO Chair of your Exam Chair by:	December 31
Research Report to General Exam Chair by:	January 31
Submit thesis committee for JCBO approval by:	April 30
Thesis Proposal defense by:	June 30, 2019

**Choosing an exam chair:** The exam chair should be a member of the WHOI Scientific Staff or MIT Tenure-Track faculty. The chair does not need to be a member of your AAC or thesis committee, but may be a member of either or both. Your advisor can not be your exam chair. The chair plays an important role in guiding the process and synthesizing the evaluation (i.e. wrangling AAC/Thesis committee members as needed). It's often useful to choose a relatively senior member of the staff for this role. The chair should have served as member of a JPBO committee within the past ~5 years. Feel free to discuss this with the Education Coordinator.

**The Research Report:** The research report is described in Section 5.1. Students may ask previous students to share their research report as an example. Once the research report is evaluated, individual AAC members sometimes give detailed comments to students, but this is not required. The exam chair will provide the student with a memo assessing the report (suggested criteria as listed in Section 5.1).

**Forming your committee:** Requirements for composition of the committee are described in Section 3.3

**Preparing for the thesis proposal defense:** The thesis proposal defense is described in Section 5.2. A couple additional tips are included below:

- It is highly recommended that students within a cohort work together to review material and practice for the exam. Students commonly hold review sessions throughout the Spring semester. They might also consider inviting senior students or faculty members to help them practice.

- Remember that you don't have to know "everything". In part the committee will be looking to see how you are able to put together the knowledge you do have to approach a problem. If you aren't sure of the answer, it's ok to indicate uncertainty, but then move forward and try to reason out an answer.
- If a question is unclear, it's ok to ask a committee member to rephrase it. Or you might try rephrasing it yourself, and ask if that is what they intended.
- It's sometimes helpful to talk with your committee members before the exam. You might want to be careful to avoid asking "what will you ask me on the exam". That might be interpreted that you haven't been studying and are trying to take shortcuts. An alternative approach could be "Here is a list of things that I think will be important to study. Is there anything else you would like me to pay particular attention to?" Or even, "I've been reviewing general biology/oceanography and thinking about some of the topics that are most fundamental to my research. I've come up with this.... What do you think?"