The “nuts and bolts” of completing a Biology major at Dartmouth are listed below. For more detailed information, please visit our ORC listing on the Registrar’s web site. The department has also posted syllabi from many of our courses that you may find helpful in selecting courses. Please see: http://www.dartmouth.edu/~biology/undergrad/syllabi/  

Prerequisites:
BIOL 11, CHEM 5 and CHEM 6 (or equivalent), and one Quantitative Course from among BIOL 29, COSC 1, COSC 5, ENGS 20, EARS 17, MATH 4, MATH 8 or above. MATH 10 (or equivalent) satisfies the quantitative requirement. Students who have completed BIOL/CHEM 8 and 9 will have fulfilled the prerequisite requirements of BIOL 11 and CHEM 5, but not CHEM 6. *If BIOL 29 is taken as a prerequisite it cannot be used to satisfy course requirements in your area of concentration.

3 Foundation Courses:
To complete the major, you must complete three of the Foundation courses, each of which has a laboratory component. The Foundation courses may be taken in any order. You do not have to complete all three before you begin taking courses numbered 20 or above. However, you will need to complete the Foundation courses that are specified prerequisites for such courses. You may elect to take more than three for your area of concentration.

*Bio 12: Cell Structure and Function
*Bio 13: Gene Expression and Inheritance
*Bio 14: Physiology
*Bio 15: Genetic Variation and Evolution
*Bio 16: Ecology

6 more courses that comprise your “Area of Concentration”:
In consultation with your Biology advisor, you will “build” an area of concentration that is composed of six more Biology courses (Bio 12-97). It is possible to count up to two advanced-level courses from other departments in your area of concentration. Your advisor will give you guidance on which courses may be appropriate. One of the six courses must be a Biology course numbered Bio 50 or above. This will satisfy the culminating experience requirement. Although only one course at this level is required, we strongly encourage you to take more than one of these courses; these are small, seminar style courses that focus on a particular topic. Because they are structured differently, they offer students a refreshing alternative to the more traditional, lecture style courses.

Biology Modified Major
Same prerequisites as the Standard Biology major (see above). Three Foundation courses, four additional Biology courses and four advanced courses outside of Biology. Courses outside of Biology may not be substituted for Bio 11, Foundation courses, or the four Biology courses. You will need to write an essay outlining the rationale of your modified major and course selection.
Advisors: Professors Bickel, McClung, Peart, and Zhaxybayeva

Biology Minor
Same prerequisites as the Standard Biology Major (see above). Two Foundation courses and three additional Biology courses (12-95). The minor does not require a specific Area of Concentration. No courses outside the Biology department may be substituted for the minor.
Advisors: Professors Bickel, McClung, Peart, and Zhaxybayeva

In the ORC you will find a list of Possible Areas of Concentration & Suggested Courses and Advisors:
Please keep in mind that this list is not rigid or exhaustive. The courses listed for each area are suggestions to help you get started. Students are not required to limit themselves to courses listed under a single area. It is also possible to engineer an area of concentration that is not listed. Any Biology faculty member may serve as your advisor, even if they are not listed under a specific area of concentration (provided they feel comfortable advising you). Our hope is that together with your advisor you will design a major that fulfills your unique interests and goals.
Questions and Answers

Who can serve as my advisor?

Any faculty member in the Biology department may serve as your advisor. (If you are pursuing a Biology minor or Modified Major, please select one of the advisors specified on the preceding page.) It is a good idea to meet with your advisor and discuss your curriculum plans well before your major cards are due.

Who decides if a course outside the Biology department is appropriate for my area of concentration?

You and your Biology advisor will discuss how courses outside the Biology department might fit into your area of concentration and if a course is appropriate.

What is the definition of an “advanced” course from another department?

We define an advanced course from outside the biology department as one that requires a prerequisite course.

Will I be able to count Organic Chemistry toward the Biology major?

The second term (Chem 52/58) may be counted.

When you meet with your Biology advisor you should be prepared to discuss the following. You do not need to know ALL the answers. This list is meant to get you to start to think about how you want to sculpt your Biology major to best fit your needs.

1) What are you trying to accomplish with your Biology major?
2) What types of Biology do you find most interesting?
3) What are your future goals when you graduate?
4) Are there particular courses that you need for your future plans?

Filling out your Major Card

Here are a couple examples of major cards to help guide you.

1) In the area marked “Major,” write Biology. Please also indicate your area of concentration (AOC)

2) Prerequisite courses required for the Biology major should be listed on the line for prerequisites, (please do NOT re-enter the prerequisites in other sections).

3) You need to fill out three identical cards. When your advisor approves your course plan, he/she will initial all three cards. Please drop off all three cards in the Biology office, and a faculty member from the Undergraduate Committee will sign all three cards. The Biology office will keep one card, send one card to the Registrar, and send one card to you.

Note: Any time you re-file your major cards, you will need to submit three new cards for approval.

Winter 2013
Planning Your Courses

When you meet with your Biology advisor you should be prepared to discuss the following. You do not need to know ALL the answers. This list is meant to get you to start to think about how you want to sculpt your Biology major to best fit your needs.

- What are your future goals when you graduate?
- What are you trying to accomplish with your Biology major?
- What types of Biology do you find most interesting?
- Are there particular courses that you need for your future plans?

Prerequisites:

Bio 11

Quantitative course (see list on page 1 of this handout)

Chem 5

Chem 6

Foundation Courses:


Area of Concentration: __________________________
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