# Frequently Asked Questions about BIOL 3994: UNDERGRADUATE RESEARCH

Undergraduate Research, BIOL 3994, is a course involving original research in a special field of study. It is arranged between a student and a <u>full-time or active part-time faculty member of the Biology Department at UMD</u>. The Biology student may also work with faculty in the Medical School or School of Pharmacy with direct consultation with the biology advisor. Credits received for independent research credits in other departments will not be transferred to BIOL 3994 without the completion of an 8-10-page research formal paper on the student research project.

## How do I apply for BIOL 3994?

You must submit the following to the Biology office (207 SSB):

- 1. The BIOL 3994 application form (reverse side);
- 2. a typed proposal (12-point font, doubled-spaced) that describes the proposed research. The proposal must be a minimum of *three* pages long and include sections on background, proposed methods, anticipated results, a timeline for your study, and a list of at least five appropriately cited references;
- 3. a current (unofficial) transcript;
- 4. and you must be making satisfactory progress toward a degree before a request can be considered.
- 5. Your request must be submitted at least two weeks before the start of the semester.

## How is BIOL 3994 graded?

The course is graded S/N. The final grade for the course will be determined by the faculty sponsor and will be based on the proposal, research participation, and the quality of a research report submitted to the faculty sponsor by the last official day of final exams during the semester in which the credits are being earned. If the research report, or alternative evaluator (see below), is not submitted by the last day of final exams during the semester, a grade of N shall be assigned unless arrangements have been made with the faculty sponsor at least two weeks in advance for an Incomplete to be reported.

#### How long must my research report be?

The research report (12-point font, doubled-spaced) must include a narrative at least eight pages long. It must include a title, introduction, methods, results, discussion, and a list of at least 10 appropriately cited references, as well as table(s) and/or figure(s) that display the results. Table(s), figure(s) and references are not to be counted in the 8-page minimum.

### Can I substitute something else for the final report?

In certain situations, a research report may not be the most appropriate product for evaluation. Other acceptable products might include biological illustrations, documentation of the creation of a website or improvements to an existing website, or a poster of the size and quality acceptable for display at a scientific meeting. If an evaluator other than a research report will be submitted for grading, it must be described and justified within the proposal.

### How many credits can I earn for BIOL 3994?

BIOL 3994 be taken for either 1 or 2 credits per semester. A maximum of 4 credits of BIOL 3994 may be used towards the elective requirement of the Biology BS, BA degree and Cell and Molecular Biology BS degree (Non-Cell Biology elective). A maximum of 4 credits of BIOL 3994 may be requested to apply to the Cell Biology elective requirement of the Cell and Molecular Biology BS if the research subject is appropriate. A maximum of 6 credits may be used towards a student's overall UMD degree requirements.

The number of credits requested (1 or 2) must be indicated on the application and clearly justified in the proposal and is based on the projected number of hours per week that will be spent doing the research. Three to four hours per week, for 15 weeks, is the minimum for each credit taken.

# **BIOL 3994 Independent Research Application**

<u>To the student</u>: Complete the information below, including signatures from your academic advisor and faculty sponsor. Once completed, append this form to your proposal and a current unofficial transcript and submit them to the Biology Department office (207 SSB). Your application will be routed to the Biology Director of Undergraduate Studies. If approved, you will be given a permission number to register for the course and the faculty supervisor assigned instructor credit. **Your request must be submitted at least two weeks before the start of the semester.** 

| Student Name: (Please Print)  | ID Number:   |  |
|---|--|--|
| Email:Ph  | hone:  |  |
| Major:Min   | ior:   |  |
| Biology Advisor:  |  |  |
| Total Credits Completed:  |  |  |
| Biology Research Advisor:   |  |  |
| Semester and Year for which registrate  | ation is requested:                                |  |
| Number of BIOL 3994 credits requested: Circle one: 1 2                        |  |  |
| Are you seeking to apply these BIOL 3<br>Cell and Molecular Biology BS degree | 3994 credits as a Cell Biology elective for the e? |  |
| Have you taken BIOL 3994 before?  | If so, when?                                       |  |
| Number of credits taken previously: _   |  |  |
| What was the title of your previous st  | tudy:  |  |
|   |  |  |
| APPROVED BY:  |  |  |
| Academic Advisor:   | Date:  |  |
| Biology Research Sponsor:   | Date:  |  |
| Director of Undergraduate Studies:  | Date:  |  |
| <b>Biology Department Head:</b>   | Date:  |  |