Howard University
College of Arts and Sciences
Department of Biology
Honors Program
Policy and Procedures
Approved: September 9th 2013

Program Overview:

Biology majors who are enrolled in the Honors Program (HP) of the College of Arts and Sciences begin their honors courses in the first semester of the sophomore year (the course is Sophomore Honors Orientation BIOL317). Students admitted to the Honors Program at the end of their freshman year (in summer) should contact the **Honors Advisor**.

Course Number	Course Title	Semester	Year	Credit	Protected Time
BIOL217	Honors Orientation	Fall	Sophomore	1	W 12-1
BIOL218	Sophomore Directed Readings	Spring	Sophomore	1	W 12-1
BIOL317	Junior Directed Readings	Fall	Junior	1	W 12-1
BIOL318	Proposal Development	Spring	Junior	1	W 12-1
BIOL491	Honors Research	Fall	Senior	2	N/A
BIOL492	Honors Thesis	Spring	Senior	1	N/A

Definitions

Instructor of Record: Faculty member listed as instructor of the course on bison web.

Internal Mentor: Department of Biology tenure or tenure-track faculty member who oversees an Honors student Directed readings, Honors Research, and Honors Thesis. The internal mentor can serve as a liaison to external mentors or directly mentor students (i.e. hands on)

External Mentor: Any tenure or tenure-track faculty member who is hands-on involved in the mentorship of Directed readings, Honors Research, and/or Honors Thesis – all students who have an external mentor, must have an internal mentor who approves, moderates, and oversees the external mentorship.

Liaison: Faculty member in the department of Biology that serves as the mentor to an Honors student engaged in Directed Readings, Honors Research, and Honor Thesis with an external faculty member. Often, the Instructor of Record serves as mentor for all external mentorships; however, this is not a requirement. An example where the instructor may not serve may be during collaborations domestic or abroad.

Instructor of Record

Duties

The Instructor of record is responsible for a) course logistics, b) entering of midterm and final grade values into bisonweb, c) coordination of student mentees with their respective student mentorship, d) collection of all evaluation means and dissemination to the faculty and the department, and e) serve as liaison for external mentorships *as needed (see definition of liaison)*. The exception will be for the Cancer Roswell Telementoring Program, to which a faculty member selected by the Chairman will serve as liaison.

Rotating Schedule

Instructor of record will be on a rotating schedule to which a faculty member will serve a respective Sophomore Honors cohort as they continue through their senior year. This provides continuity for the students as they progress through the Honors Program. The scheduling will be on a voluntary basis; the Chairman will select faculty in the event that there is insufficient volunteers to handle a five-year block.

	Fall	Spring	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Sophomore	217	218	Lipscomb	TBD	TBD	TBD	TBD	START OVER
Junior	317	318		Lipscomb	TBD	TBD	TBD	TBD
Senior	491	492			Lipscomb	TBD	TBD	TBD

Teaching Responsibilities
Required to teach Sophomore Honors Orientation course held Wednesdays from 12-1PM. The course is expected to be carried out following the syllabus developed by the Curriculum Committee and approved by the Faculty of the Department of Biology. The syllabus notates the specific portions/areas that are *free* for the instructor to modify under the pretenses of Academic Freedom. Revisions to the syllabus are to be reviewed every five years by the Curriculum Committee to ensure compliance and adjustment for modernization and changes to the curriculum.

Honors Student

Honors courses (which include Honors Orientation, Directed Reading, Research, and Thesis) classes are courses of individualized instruction, available only to biology majors in the COAS Honors Program, in which a student is introduced to a specific area of research in biology under the guidance of a faculty mentor. The student meets with the mentor for one hour each week to discuss assigned readings in the current periodical literature. Papers are analyzed critically for findings and methodology, with the aim of accumulating information on current knowledge and outstanding issues in the specific area of research. This experience develops the skills and background information necessary for writing a thesis proposal to be submitted no later than the middle of the semester in which Honors Research is taken.

Coursework

Honors Orientation (BIOL217)
Honors Orientation is an introductory course. The goal of the course is to instruct the Honors students to the programmatic structure and theme of the Honors program, assist in identify mentors for continued thesis development, and introduce the Departments research infrastructure, participating faculty members, and options for engaging in research and scholarly productive through the Honors program courses. Letter grade; 1-unit

***Note: Rubrics are predominately reserved to for external mentors; faculty members in the Department of Biology can use the standard letter grade sytem*

Sophomore Directed Readings (BIOL218) and Junior Directed Readings (BIOL317)
Students will engage with their mentors to read primary and secondary literature on a given subject or specialty within the biological sciences. Mentors will direct students through literature to gain a better understanding and background of key concepts, as well as learning to dissect, compartmentalize, evaluate, and interpret data and experimental methods. It is a goal that this understanding will provide an avenue into development of an Honors proposal and transition into Honors Research. Letter grade; 1-unit

Assignment	Points	Explanation
References	25	All journal articles read for the given semester should be assembled into appropriately formatted bibliography or literature cited page.
Participation	40	Dates of meetings should be assembled; minimum of eight class meetings. Attendance to the research seminars. 5-pts per meeting.
Report	35	Minimum ½ page - Maximum two-page summary report of articles read, annotated with

		learning objectives, relevance to research proposal, and overall significance
Total	100	89-100 – "A"; 79-88 – "B"; 68-78 – "C"; <67 "D"

Honors Proposal Development (BIOL318)
During this course, students will be heavily engaged in developing their proposal. Effectively, the proposal is a plan, or guide, to be followed during Honors Research in order to generate the substantial body of work required for the thesis. It is expected that the student will begin formulating their hypothesis and begin inquiry based-investigations, through a combination of extensive literature search and generation of preliminary data through laboratory practice. A title and 30-line proposal abstract is required for successful completion of the course. Letter grade; 1-unit

Assignment	Points	Explanation
References	25	All journal articles read for the given semester should be assembled into appropriately formatted bibliography or literature cited page. Minimum of eight (8).
Participation	40	Dates of meetings should be assembled; minimum of eight class meetings. Attendance to the research seminars. 5-pts per meeting.
Proposal	35	A title and 200 word maximum abstract is required for successful completion of the course
Total	100	89-100 – "A"; 79-88 – "B"; 68-78 – "C"; <67 "D"

Honors Research (BIOL491)
Students are expected to be heavily engaged in active research with their respective mentor. The aim is to generate data following their submitted proposal. This data will be used to generate the Honors thesis during BIOL492 in the spring of the senior year. This 3-unit course serves as an Advanced Elective. Note: students register for Honors Research-BIOL491 not the Independent Investigations course BIOL390. Suggested letter grade is provided by mentor.

Honors Thesis (BIOL492)
The honors thesis must be completed by mid-semester (last day for the submission of mid-semester grades in the COAS) of the final semester in residence. The thesis proposal and the honors thesis must be done under the supervision of the faculty mentor. While the honors thesis is expected to be a substantial exploration of the research topic, its length and content are at the discretion of the honors internal (and, if applicable, external mentor), who must approve the honors thesis before it is submitted to the Honors Program. Suggested letter grade is provided by mentor.

An ideal honors research experience is a supervised, self-motivated exploration with guidance and assistance from the mentor, as needed. Furthermore, a single individual working on an individual project may be an anachronism in modern biological research. Teamwork and collaboration are the current norm. Therefore, it is perfectly understandable for an honors student's project to be a part of a larger enterprise conducted with the aim of producing publishable results. The importance to a prospective graduate's career of co-authorship of an abstract or full report in a reputable scientific journal cannot be overstated.

Mentors

Internal Mentors
All faculty in the Department of Biology (with exception of adjunct lecturers) can serve as mentors. It is expected that faculty serve from onset of Sophomore Directed Reading throughout completion of the respective student's Honors thesis development and submission (BIOL- 218, 317, 318, 491, 492). An ideal honors research experience is a supervised, self-motivated exploration with guidance and assistance from the mentor.

External Mentors

Mentors outside the Department of Biology that carry a tenure-track Faculty position may, after approval by the Faculty of the Department of Biology, serve as mentors to Biology Honors students. Mentors are bound by all the mandates applied to the internal mentors (i.e. Department of Biology Faculty members) in guiding students through Directed Readings, preparing Honors thesis proposal, providing a training environment to pursue Honors Research, and submitted completion of the students Honors Thesis.

Importantly: All Honors students must have an internal mentor that serves as liaison, with responsibilities to supervise and ensure all Directed Readings, Honors Research, and Honors thesis under the external faculty member is in compliance. The liaison, through coordination with the external mentor, supplies the suggested grade and student evaluation to the Instructor of Record.

In addition, external advisors must submit an External Mentors Agreement form. The form requests: a) approach (or plan) for mentorship of the specific Honors student, b) defined measurable outcomes expected of the student, c) summary of the qualifications of the mentor to carry out the specific mentorship of the student, and d) significance of the body of work that the student will learn and be trained in. After completion, the submitted form will be evaluated by the Faculty of the Department of Biology for a) approval, b) denial, or c) approval with modifications.

An honors student should never be just "a pair of hands". If it is found to be the case that an Honors student mentorship has been called in to question of compliance or integrity, the Department of Biology will investigate all claims and can remove external mentors from such position. Additionally, an external mentor who fails to comply can be barred from serving as mentor in the capacity of all Honors courses under the Department of Biology.

Evaluation and Grade Assignment

All Internal and External Mentors must adhere to the grading rubric as approved by the Department of Biology. The mentor is required to submit the completed grading rubric, all requested supported material, and suggested total points earned (as a reflection of grade assignment) to the Instructor of Record by the 14th week of the respective semester. It is the requirement of the internal and external mentors to ensure completed materials by their respective student mentee are completed and submitted to the Instructor of Record.

Activities outside the Department of Biology

It is typical practice that the Department of Biology will not, nor does it sees itself as a regulatory authority, to deny any student from participation in any activities outside the required coursework. Exceptions may include conflict of interests under contracts and grants to which students are participating (i.e. Environmental Biology Scholars program or Cancer Roswell Park-Honors Partnership).