

BIOD95/98/99



Fall & winter 2019/20

Course description

BIOD95: This course is designed to permit intensive examination of the primary literature of a selected topic. Frequent consultation with the supervisor is necessary and extensive library research is required. The project will culminate in a written report/thesis. Four sessions of group instruction (tutorials) will form part of the mandatory coursework in the Fall term and three sessions are mandatory in the Winter term. In addition, you will be required to attend one of the three days assigned for individual consultations in the Fall term (weeks 7, 8, 9) or one of the three days assigned for individual consultations in the Winter term (weeks 5, 6, 7). You will be notified which day you will have your individual consultation. Note that in both terms, there are more tutorials than D95 students will be required to attend, as many are shared with D98/99 students.

The outlined minimum number of tutorials (above) is mandatory and attendance and participation in them is valued at 10% of your final grade.

BIOD98: A course designed to permit laboratory or field research or intensive examination of a selected topic in biology. Supervision of the work is arranged by mutual agreement between student and instructor. Eight sessions of mandatory group instruction (tutorials) will form part of the coursework. During the fall term, six tutorials need to be attended, as well as two tutorials in the winter term. In addition, you will be required to attend one of the three days assigned for individual consultations in the Fall term (weeks 7, 8, 9 in the fall) and one of the three days assigned for individual consultations in the Winter term (weeks 5, 6, 7 in the winter). You will be notified which day you will have your individual consultation.

The outlined minimum number of tutorials (above) is mandatory and attendance and participation in them is valued at 10% of your final grade.

BIOD99: Identical to BIOD98Y but intended as a second research experience. In order to be eligible for BIOD99Y, with the same instructor, the student and the instructor will have to provide a plan of study that goes beyond the work of BIOD98Y. Students who have taken their previous D98 in the fall & winter of the previous academic year are required to attend only two of the mandatory sessions (week 9 in the fall and week 3 in the winter). You will also need to attend the individual consultations in the fall and winter terms. In addition, you will also need to turn in all the documents as required by the deadlines listed in the course schedule (e.g. revised Introductions, Abstracts, Goals and Timeline sheet and final paper outlines). Students who have taken their D98 in the summer term will have to attend all eight mandatory tutorials.

The outlined minimum number of tutorials (above) is mandatory and attendance and participation in them is valued at 10% of your final grade.

Instructors

Prof. Aarthi Ashok

Office hours: by appointment → aashok@utoronto.ca

Office location: SW 521D

Prof. Ivana Stehlik

Office hours: by appointment → ivana.stehlik@utoronto.ca

Office location: SW 563C

TA Terrence Chang

Office hours: by appointment → terrence.chang@mail.utoronto.ca

TA will be present at all sessions

Prerequisites

D95: 12.5 credits completed with at least 4 are at the B/C level

D98/99: 13.5 credits completed with at least 4 are at the B/C level

Time and location

Tuesdays, 2-3 pm, BV260. Any exceptions will be noted in the Course Syllabus

Quercus online resources

Like many other courses, BIOD98Y3, BIOD99Y3 & BIOD95H3 use a **combined Quercus course site**. Log in using your UTORid and password. Once you have logged in, look under 'Home' and 'Assignments' for all relevant course links. General course information & schedule of classes, course materials and important announcements will be posted on the Quercus site for this course. There will also be a discussion board for students to share ideas about their research projects or ask each for experimental reagents or advice. The final presentation schedule for D98/99 students will be posted on this site in the winter term as will any changes to the tutorial schedule. Please make sure to check this site frequently for updates.

Evaluation

D95

By the project mentor/advisor (first reader); paper; 80%

Your mentor or advisor will evaluate your lab/literature research skills, your level of dedication to your project, your intellectual contribution to project development, your lab meeting presentations or contributions, your final thesis paper and your final oral presentation = 80% of your final grade. A breakdown of your mentor's evaluation should have been provided to you as part of the departmental form for BIOD95.

By the course TA (TC); attendance; 10%

The TA will evaluate your participation and attendance at tutorial sessions = 10% of your final grade in the course.

By the course instructors (AA/IS; second readers); paper; 10%

Either Profs. Ashok or Stehlik will evaluate your final thesis research paper worth 10% as a second reader (in addition to the project mentor/advisor)

D98/D99

By the project mentor/advisor (first reader); paper; 70%

Your mentor or advisor will evaluate your lab/literature research skills, your level of dedication to your project, your intellectual contribution to project development, your lab meeting presentations or contributions, your final thesis paper and your final oral presentation = 70% of your final grade. A breakdown of your mentor's evaluation should have been provided to you as part of the departmental form for BIOD98/99.

By the course TA (TC); attendance; 10%

The TA will evaluate your participation and attendance at tutorial sessions = 10% of your final grade in the course.

By the course instructors (AA/IS; second readers); paper; 10%

Either Profs. Ashok or Stehlik will evaluate your final thesis research paper worth 10% as a second reader (in addition to the project mentor/advisor)

By an evaluation team (TA, instructors IS/AA and 'voting members' of the audience): 10%

The appropriate members of the audience together will contribute to the evaluation of your oral presentation = 10% of your final grade in the course.

Submission of papers to Turnitin

Students will be asked to submit their papers to Turnitin as embedded in Quercus for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their papers to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site:

<http://www.utoronto.ca/ota/turnitin/ConditionsofUse.html>

Turnitin.com is most effective when used by all students; however, if and when students object to its use on principle, the course offers a reasonable offline alternative. The student will then be asked to meet with the course instructor to outline and discuss the report before its final submission to demonstrate the process of creating the report according to the academic integrity policy.

Best Undergraduate Research Presentation Award (Bio BURP)

2017 was the inaugural year of the *Department of Biological Sciences Best Undergraduate Research Presentation Award* (Bio BURP). This award acknowledges two students for exceptional presentations of their independent research work (as part of the BIOD98 or BIOD99 courses) on D98/99 Presentation day, with a monetary prize. One Bio BURP is awarded in the field of Cell and Molecular Biology and one in Ecology and Evolution.

Schedule Fall term

Week of the semester	Date and instructor	Event	Mandatory for
1	Tue, Sep 3	No class	
2	Tue, Sep 10 (AA)	Course introduction, expectations, learning goals	D98, D99*
3	Tue, Sep 17 (AA)	Discussion of case studies	D98, D99*
4	Tue, Sep 24 (IS; library)	How to access information as a scientist	everybody
5	Tue, Oct 1 (IS; writing center)	Critical reading, note-taking and the writing process	everybody
6	Tue, Oct 8 (AA)	Thesis writing	everybody
Reading week, Oct 12-18, no class			
7	Tue, Oct 22 (AA, IS, TC)	Individual student consultations (Goals & Timelines sheet, including detailed list of literature readings)	everybody
8	Tue, Oct 29 (AA, IS, TC)	Individual student consultations	everybody
9	Tue, Nov 5 (AA, IS, TC)	Individual student consultations	everybody
9	Fri, Nov 8	Submission of revised Goals & Timelines sheet to TA: terrence.chang@mail.utoronto.ca	everybody
10	Tue, Nov 12	No class	everybody
11	Tue, Nov 19 (AA)	Critiquing Introductions: peer review	everybody
12	Tue, Nov 28	Submission of improved Introductions to TA: terrence.chang@mail.utoronto.ca	everybody
	Mon, Dec 2	Submission of D95 Research Paper by 4PM (20% penalty per day of your final grade in course will apply if paper is late)	D95

*Not required for D99 students who have completed a D98 in the Fall/Winter terms. Mandatory for D99 students who have completed a D98 in the Summer term.

Schedule Winter term

Week of the semester	Date and instructor	Event	Mandatory for
1	Tue, Jan 7 (IS & library)	Course expectations & accessing information	D95 only
2	Tue, Jan 14 (AA)	Note-taking and the writing your paper	D95 only
3	Tue, Jan 21 (AA)	Critiquing Abstracts: peer review	everybody
4	Tue, Jan 28	Submission of improved Abstracts to TA terrence.chang@mail.utoronto.ca	everybody
5	Tue, Feb 4 (AA, IS, TC)	Individual student consultations (Paper outline & results (or anticipated results) sketch up)	everybody
6	Tue, Feb 11 (AA, IS, TC)	Individual student consultations	everybody
Reading week, no class			
7	Tue, Feb 25 (AA, IS, TC)	Individual student consultations (if necessary)	everybody
8	Tue, Mar 3	Submit FINAL paper outlines with sketch up of results (or anticipated results) and details of data analysis to be performed to terrence.chang@mail.utoronto.ca	everybody
9	Tue, Mar 10 (IS)	Presentation skills	D98, D99*
10	<i>Tue, Mar 17 No class</i>		
11	Tue, Mar 24 (TC)	Special office hours with TA Q &A about thesis writing/ practice presentations	everybody
12	<i>Tue, Mar 31 No class</i>		
12	Fri, Apr 3, by 4 PM	Submission of paper in office SW420-B	everybody
	Mon, April 6 (AA, IS, TC)	Presentation Day & BioBURP [§] awards (all day; location TBD)	D98, D99

*Not required for D99 students who have completed a D98 in the Fall/Winter terms. Mandatory for D99 students who have completed a D98 in the Summer term

[§]BioBURP: Best Undergraduate Research presentation; one for the Cell and Molecular Bio section, one for the Ecology and Evolution section