

Expectations for faculty around Directed Research/Studies

Instructor of Record: Faculty who mentor a directed research or directed studies student in CBS are the instructor of record for the course, and must follow the University of Minnesota policy on Instructor Responsibilities (<http://policy.umn.edu/education/instructorresp>). Instructor responsibilities include providing an appropriate learning environment, providing students with feedback on their work, and maintaining an appropriate schedule. The following expectations can be met in part by research staff who work directly with the student; we also expect the faculty mentor to directly interact with the student. CBS expects a faculty mentor to:

- Establish clear and reasonable objectives and a timeline for completion of the work for the semester.
- Establish a regular schedule for in-person meetings with the student and forms of acceptable alternative means of communication (emails or phone calls).
- Provide regular formative and constructive feedback for the student.
- Provide a supportive learning environment that is free of harassment.
- Act as a mentor: help the student develop into an independent researcher, assess the student's understanding of core concepts and help address deficiencies. Initiate conversations with mentees on professional goals and career development.

Mentors who do not meet these expectations could be restricted from future participation in CBS directed research/studies.

Directed Introduction to Research (BIOL 2996): Directed Introduction to Research is meant to be a shadowing, introductory-type experience for students who have not previously been involved in research. This should involve attending lab/group meetings and spending time with a researcher or the faculty mentor to learn about techniques and topics in the research area.

Directed Research (4994/4794W): Directed Research is appropriate for students engaging in independent, mentored research and who would like to earn course credit for this work.

Directed Studies (4993/4793W): Directed Studies is typically intended for students who are doing a literature review project that does not incorporate data collection or novel data analysis.

Writing Intensive: The writing intensive course is meant for students to write a paper describing their research. Students should have prior experience with their research project, otherwise they need to petition their DUGS in order to register for WI-DR. WI credit requires that the student and faculty mentor engage in ongoing writing instruction over the entire semester. WI-DR instruction and outcomes must meet campus policies for all WI courses. The requirements and explanatory commentary can be found here: <http://undergrad.umn.edu/cwb/definition.html>.

Registration: Students registering for Directed Research or Directed Studies should initiate an online contract (found here: <http://cbs.umn.edu/info/undergraduate/directed-researchdirected-studies-contract>). This contract is completed by the student and the faculty mentor, and then sent for approval by the DUGS of the student's major. For BIOL 2996, the faculty mentor should not check more than the minimal requirements (attending group meetings, submitting a final paper) in their portion of the contract. Once the contract is approved, the student is issued a permission number to register. The registration timeline for Directed Research and Directed Studies follows the same timeline as all courses at the University of Minnesota (http://onestop.umn.edu/calendars/cancel_add_refund_deadlines/). Contracts should be completed no later than the 10th day of classes, which is the last day that changes to a student's schedule can be made without college approval.

Time commitment/grading: The requirement for Directed Research is 45 hours per term for each credit. BIOL 2996 should be 1 credit for ~3 hours per week. A 3-credit course requires 8-10 hours per week. Students and faculty mentors are responsible for tracking this time. All Directed Research and Directed Studies courses are graded S/N (pass/fail).

CBS Honors Students: Serving as a faculty mentor for a CBS honors student requires additional time to provide writing instruction and feedback on drafts of each part of the student's thesis. For any questions or concerns about mentoring an honors student, please email Dr. Dana Davis (dadavis@umn.edu).

Questions about undergraduate research or Directed Research/Studies courses can be addressed to CBS Student Services at cbsrsrch@umn.edu.