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Driskill Graduate Program in Life Sciences

Graduate Program Goals/Mission Statement:

We seek to provide students a challenging and supportive environment in which students will develop into independent scientists. Students should learn fundamental biological principles, develop critical thinking skills, and develop both oral and written communication skills. Students are also expected to generate a body of work that contributes to new knowledge in their field.

Learning objective(s) <u>Students should be able to</u>	Milestone/ Requirement /Capacity	Assessment Strategies and Criteria* <u>How do we know this objective has been achieved?</u> <u>What criteria do we have to measure success?</u>
Comprehend fundamental biological principles	Coursework	Successfully complete coursework, including core classes, with a cumulative GPA of at least 3.0.
Develop Critical thinking skills	Research, proposals, experimental design and analysis	 Coursework includes proposal writing for many electives. Students are required to take a course on proposal writing, which must be passed. Qualifying exam consists of developing a research proposal. Student must write the proposal and defend to a faculty committee. Student needs to develop a thesis proposal and submit to their committee for approval. Student must conduct original research. Students are expected to design and analyze their own experiments as they advance through the program. Progress is tracked by the advisor and thesis committee.
Present information verbally, advancing their oral communication skills	Seminar requirement, thesis committee meetings and defenses	 Each student is required to present their work orally at least 3 times during their graduate career. Venues may be internal (student research clubs, department seminar series, etc.) or external. Student must orally defend their proposal as part of their qualifying exam. Faculty committee determines whether the student was successful in defending their proposal and gives the student feedback. Student must present their ongoing work to their thesis committee on at least a yearly basis. Thesis committee evaluates the presentation and provides feedback. Student must orally defend their thesis proposal. Thesis committee determines whether the student was successful.

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Communicate through writing, advancing their written communication skills	Qualifying exam, thesis proposal and committee meetings, thesis, publication	 Qualifying exam written proposal is evaluated by a faculty committee and feedback is provided. Thesis proposal is submitted to the thesis committee for evaluation. Thesis committee provides feedback to the student. For each yearly committee meeting, students must submit a written report of their research so far and plans for the future to be evaluated by the thesis committee. Student must communicate their research in their dissertation. Dissertation is evaluated by the thesis committee. Students must publish at least one first author, peer reviewed research publication.
Contribute to their field	Thesis, Publication	 The thesis committee evaluates the written thesis to determine whether it constitutes a significant contribution to the student's field of research. Students must publish at least one first author, peer reviewed research publication.