

### **Thornton Undergraduate Research Policies: Student directed projects**

1. Students can apply for a Thornton Undergraduate Research Scholarship and/or Supply Grant. The format for proposals is available on the Biology program website as are the instructions for submission
2. Full time undergraduate students who are making reasonable progress toward an undergraduate biology degree at Western (24 credits per academic year, 12 per semester minimum) and have a 3.0 gpa are eligible for a Thornton Undergraduate Research Scholarship. Applicants having undergraduate degrees in areas other than biology, who are currently studying for a biology degree, must meet the same criteria as other students. Scholarship awards for post baccalaureate students will be approved only if there are funds available after awarding undergraduate proposals. Students from other science disciplines may apply for funding of biology research if a member of the biology faculty is included in the project.
3. For those grants seeking research scholarship awards, applicants are expected to have and maintain a 3.0 gpa at the time of application and throughout the research. Students with a lower gpa may be considered on an individual basis if the student received a 3.0 in the last semester prior to the award.
4. The maximum amount for one scholarship award is \$3,000 (based upon a minimum of 300 hours of work). There is a limit of one such award during the fall/spring academic term and a limit of one award for the summer term.
5. It is expected that students will work closely with faculty and under frequent faculty supervision.
6. Research results will be presented at Colorado-Wyoming Academy of Science Meetings, at Regional Meetings of Tri-Beta, at other regional or national meetings, and/or at departmental seminars.
7. One of the purposes of the scholarship is to provide students with financial assistance that encourages research activities. Therefore, it is assumed that recipients of research awards will decrease their obligations in other areas of their lives (for example extracurricular work) as they undertake research responsibilities.
8. Students may register for independent study (Biol 392) related to their research (only four credits total applicable toward a biology degree). Students must enroll in a minimum of 1 credit during the semester of their award. This requirement meets current IRS rules for scholarships.
9. In awarding Thornton funds, preference will be given to students and faculty who have not been awarded research funds during the present fiscal year.
10. It is expected that students will be actively involved in the writing of the original proposal.

11. A final research report must be submitted to the Thornton Research Committee one month after the completion of the project. The final report should include Abstract, Introduction, Methods, Results, Discussion and Conclusion of the finished research. A summary of Total Expenditures should also be included in the final report. If the research resulted in a presentation at regional or national meetings, please include an abstract in the final report. If the research is accepted for publication, please forward a copy of the publication to the chair of Thornton Research Committee. Copies of final reports will be maintained by the Thornton Research Committee.
12. Responsibility for the final report lies primarily with the student.
13. \$500 of the scholarship award is withheld until submission of the final report. Responsibility for notifying the NES secretary that the remainder of the scholarship should be paid lies primarily with the student's research mentor.
14. No new proposal from a student will be accepted if a final report from an outstanding proposals has not been submitted.

**Criteria for Evaluation of Proposals  
Thornton Research Committee**

Merit of the Proposal

Valuable to the student's education/future/goals?  
Potential for the development of future research projects?  
Good experimental design/protocol?  
Respectable bibliography?

Feasibility of the Proposal

Realistic Time Frame to accomplish research?  
Realistic as to the availability of equipment and other resources  
necessary for the work?

Extent of Student Involvement

Should require considerable time and effort for each student

Student Qualifications

Necessary coursework completed?  
Qualifying GPA?  
Preliminary work completed?

IRS rules

Students must be enrolled in a class (es) during the semester of their award.