Southwestern College Biology Research/Education Associate, Activity Grants

Education Associates—Description

The Biology Research Associate and Education Associate Activity Grants are designed for students who want to become more engaged in the academic life of the college, either through research or educational outreach.

Education Associates will develop or be assigned to educational outreach projects directed at either adult learners or a specific group of K-12 students. The primary goal of any project is to educate specific groups about nature, biology and science. These projects could be designated field days held at the Moore Biological Field Station or other locations, visits to local schools, summer library outreach programs, or a collaboration with a particular school where the education associate or teams of students deliver material/information in the sciences on our campus.

Each year of the appointment, the associate will consult with the biology faculty to choose a project and faculty mentor that are consistent with the interests of the associate and the needs of the department. During the freshman and sophomore years the associate will typically be assigned to an on-going project. In subsequent years, the associate will take on a leadership role and either continue to work on the same or a similar project to which they were initially assigned, or choose/develop a different project, again through consultation with the biology faculty.

The expectations are four-fold: 1) a time commitment of 4-6 hours per week; 2) regular consultations with the faculty mentor; 3) involvement (that may include presentations) in one or more educational projects per semester; and 4) submission of a written summary of their activities each semester. Associates will have the option of enrolling in either Problems in Biology or Readings in Biology once per year (1 credit, S/U grading). Students accepting the Biology Education Activity Grant may participate in other activities (e.g. band, cross-country, theater, etc.). However, it is our advice that students be aware of the time commitment and limit their participation in multiple activities.

Potential Projects

Below is a list of potential project ideas that Education Associates (EA) could develop or be assigned to, as some of them are ongoing or have occurred in the past (*).

- Conservation Day * Working with employees of the National Resources Conservation Service, the EA would develop and implement hands-on, biology-related activities for visiting elementary school students at the Winfield Lake
- Home School Science Day* Presently, this is a half-day science program put on by SC students in Beta Beta Beta, the biology honor society, for home-school students throughout the region to come to Southwestern College and participate in hands-on science activities. As part of this program, the EA could develop new science activities and play a lead role in the planning and organization of this event.

- Hands-on Science Activities at Elementary Schools The EA could develop transportable, hands-on science activities or modules that they or other students would present in district grade schools.
- Science Teaching Modules for Moore Field Station The EA could develop field modules that would provide elementary and secondary science teachers from regional schools with ready-to-go field lab opportunities that meet science education standards
- Rotating Displays The EA could develop biology-related displays using different media types to be put on show in the Beech Science Center.
- Summer Science Bus* The EA could develop and implement science outreach programs for youth at public libraries throughout Kansas. In the summer of 2010, SC biology professors developed a program called "Life in a Drop of Water An Aquatic Safari" and visited eight libraries in western and eastern Kansas and connected with hundreds of kids. The success they met with this endeavor suggests there is great future potential for this project.
- Science Programs for Local Youth Groups The EA could coordinate with groups like Girl Scouts/Boy Scouts or Big Brothers Big Sisters and develop hands-on science activities and/or science field trips to the Moore Field Station.

For more information concerning the Biology activity grants, contact: Dr. Charles Hunter, <u>charles.hunter@sckans.edu</u> 620 229-6326