College of Arts and Sciences

Student Ambassadors Program

Activity: Undergraduate Multidisciplinary Research Challenge (UMRC)

What is UMRC? The UMRC is an interdisciplinary challenge that focuses on local and regional problems that have a global impact. Student teams will work on a proposal to solve a problem that can be addressed from various approaches. This year’s proposed problem revolves around chemical waste and PCB’s in the Spokane River:

**Saving the Spokane:** Polychlorinated biphenyl (PCB’s) are chemicals that are found in a number of commercial products (transformers, motor oil, inks and dyes) and are persistent in the environment. Levels of PCB’s that violate the federal Clean Water Act have been found in the Spokane River and bioaccumulation in the fish populations has been recorded by the Department of Ecology. The Spokane River Regional Toxics Task Force (SRRTTF) was formed to address these issues and has established a goal of developing a comprehensive plan to bring the Spokane River into compliance with water quality standards for PCB’s and Dioxins. The task force is actively working to analyze existing and future data to characterize the amounts, sources and locations of PCB’s and prepare recommendations for controlling and reducing the sources of listed toxics in the river.

**Challenge:** As a team, create a proposal designed to work with local communities in Washington (residential, commercial, agricultural, etc.) to reduce the levels and educate the public about PCB’s and other major river contaminants. This proposal should focus on long-term sustainability, efficacy and should address the affected community as a whole.

Set up:
- Students can register under their major and department, or they can apply online at [http://cas.wsu.edu/about/ambassadors/umrc/umrc.html](http://cas.wsu.edu/about/ambassadors/umrc/umrc.html) Applications will be sent to departments for review.
- Departments will nominate one or two lower (Freshman/ Sophomore level) and upperclassmen (Junior and Senior level) students as candidates that will represent their discipline in the challenge. Only one from each level will be chosen to participate in the challenge. Pre-certified students must be officially advised in the CAS.
- The ambassadors’ challenge sub-committee will get in touch with them and invite them to apply to be part of the challenge. Based on responses and the student’s commitment to this long term project, the committee will choose the final two per department/program, for a total of 36 students (9 teams with 4 students each.) These will provide a broad representation of all disciplines within the college. The sub-committee will strive for as much collaboration and interdisciplinarity as possible in the final selection and groups’ conformation.
• Teams of 4 will be created according to the following criteria:
  o One at least from each level
  o 2+ disciplines must be included; each team must have representation from at least two of the following general areas: Arts/Humanities, Sciences, Social; Sciences

Proposed timeline:
• Fall 2013:
  – Implement media campaign
  – departmental nominations and student registration
  – finalize funding requests, question and consultants
• Friday November 15, 2013:
  – Meet & Greet event, teams formed
  – Guidelines, info packets given
  – Question released
  – Student participation contracts signed
• Monday February 3, 2014:
  – Checkpoint: a list of sources and rough draft of proposal from each team to be turned into the CAS office
  – Provide feedback on proposals
• Saturday April 19, 2014:
  – Final presentations. Winning group will be selected by a jury; the top two will be invited to present during the banquet, later that day.
  – Winning group will be announced during a reception. The group is raising funds to allow both 1st and 2nd place groups to be awarded scholarships.

How can you support this program?
• The students are raising funds for program costs and scholarship awards. CAS has provided $5000 in support. They have applied for internal and external funding with limited success given it is a new program. Any ideas of potential donors are more than welcome.
• If the topic is of particular interest to you, you may want to volunteer as a consultant to the student teams, or as a judge for the competition, which will take place in April.
• You are welcome to attend the Awards Reception. All groups will have a poster summarizing their project, and the winning group will do a brief presentation for the audience.