COURSE DESIGN TECHNOLOGY GRANTS

Program Overview

The Course Design Technology Grant program is a joint initiative co-sponsored by the Academic Affairs Division and Academic Technology Center at WPI. The grants are administered by ATC Technology for Teaching and Learning staff, who work with the Morgan Teaching & Learning Center, Educational Development Council (EDC) and other instructional and information service groups on campus, such as Information Technology, the Gordon Library, and other departments within the Academic Affairs Division.

The goals of the Course Design Technology Grants are to assist faculty with:

- Designing their instructional approaches using technology as a central part of the course to achieve enhanced learning.
- Taking advantage of efficiencies that can be realized through the use of emerging technologies for teaching.
- Evaluating the impact of new instructional approaches.

Details of the Course Design Technology Grant program include:

- Faculty work one-on-one with an ATC project coordinator to define, design, implement, and evaluate the course design. Other members of the WPI community are brought into the project on an as-needed basis. If faculty apply for a grant as a group, the entire group works with the ATC coordinator.
- Course designs will look to technology to assist with addressing teaching challenges. Course designs require more than just using technology as an add-on and instead will incorporate technology into the course on a broader scale.
- Designed courses must be implemented within two years of the time the grant is awarded, but the timeline for the project can be flexible. For example, a course may be implemented and evaluated within 6 months or within 18 months, depending on the scope of the design, when the course is scheduled, etc.
- Funding is available to support course design projects. Proposals must include a budget justification which identifies how the money will be used.
- Evaluation of each course design project is required to determine whether or not the project objectives and learning outcomes were achieved. This evaluation should occur within 6 months of implementation.
- Faculty who receive a grant are expected to share their experience with their WPI colleagues. Food for Thought sessions, department presentations, or other similar venues would be appropriate. They are also required to write a brief report summarizing the project activities and learning outcomes.
Examples of Course Design Projects

- Create immersive experiences for students using 3D projection, augmented/virtual reality, adaptive simulations, or other interactive environments that achieve desired learning outcomes.
- Develop learning activities or supplemental course resources specifically targeted for use on mobile devices or field-use.
- Explore using a flipped classroom model, where students view a combination of simulations and/or streaming videos for “lecture” content prior to coming to class so that scheduled class time can be spent doing interactive problem solving, group project work, or engaged in other higher-order thinking activities.
- Incorporate interactivity into the writing process from drafts to instructor feedback by using wikis and screen capturing software to make the process more collaborative and engaging.
- Engage students in the course content by having student groups teach the rest of the class about a key concept in the course. Students create a wiki page or a multimedia project that teaches the other students about each concept.

Eligibility and Criteria

All WPI full-time faculty members are eligible to apply for a Course Design Technology Grant. Teams of faculty who want to collaborate on a joint project are also encouraged to apply. Part-time adjunct faculty are welcome to apply to the program with a full-time faculty member.

To be awarded a grant, faculty must submit an application outlining specific challenges they are facing in a course they are scheduled to teach within the next two years. The application also requires faculty to submit a budget, ideas for evaluating their course design project, and ideas for sharing their experience with others at WPI and beyond. Grantees are responsible for consulting with WPI’s Institutional Review Board (IRB) to determine if the project involves human subjects and constitutes exempt or non-exempt activity.

Proposals will be evaluated by members of the EDC and the ATC on the following criteria:

- Significance of the teaching challenge and the potential impact on student learning by designing the course and incorporating technology.
- Initial ideas for evaluating the impact of the course design and student learning.
- Plans for sharing the course design experience with others (i.e. making a presentation at a Food for Thought session or department meeting).
- Project’s overall feasibility, likelihood of success, and alignment with the stated goals of the program.
- Cost effectiveness and how the grant will enable the proposed work.

Funding Levels and Allowable Costs: Grants for single investigators focusing on a single course or project center have ranged from $3,000 to $7,000 in recent years. The EDC encourages
multiple investigator, program-wide, and/or cross-disciplinary initiatives, which would be suitable for higher levels of funding.

Typical allowable costs include: (a) hourly wages for students (not tuition); (b) faculty compensation (note 1); (c) fees for an assessment/evaluation consultant; (d) supplies, software, and equipment (note 2); and (e) travel and professional development related to the project. Evidence of cost-sharing from the program or department, or from other sources, often strengthens a proposal but is not essential.

**Note 1:** Applicants are encouraged to hire students for project activities whenever appropriate. Faculty compensation is appropriate only for activity that extends beyond normal teaching expectations; applicants are advised to address this point in their budget justification. Faculty compensation may be used either for summer support or academic year release time (pending approval of department head). For full-time faculty and staff, benefits will not be charged to these grants.

**Note 2:** This grants program does not provide funding for software and equipment for routine education of WPI students since that normally comes from department capital or IT budgets. However, software or equipment necessary for enabling pedagogical innovation is suitable for funding.

**Application Process**

Applicants are encouraged to discuss their ideas with one of the individuals listed below prior to submitting a proposal.

To apply for a Course Design Technology Grant, a cover page and proposal must be submitted no later than **February 2, 2015**. Submissions can include a complete hard copy of the cover page with original signatures and the proposal, or a hard copy with original signatures of the cover page with a Word file containing the remainder of the proposal. **Proposals should be submitted to Kate Beverage in the ATC (x6012, kwrigley@wpi.edu).**

Applications will be reviewed by representatives from the ATC and from the Educational Development Council (EDC), including at least two faculty and a student. Applicants will be notified of the review committee’s decisions by the end of D-term.

Proposals should contain:

- **Cover page** (see attached)

- **Narrative**
  The narrative should not exceed five double-spaced pages and should include the following:
  - The scope of the teaching challenge to be addressed
  - The objectives of the project
A description of the proposed course design, including specifics on how technology will be included and how it will assist with achieving the objectives

- Expected results
- A plan for evaluating the results of the project
- A plan for sharing the course design experience with others at WPI (i.e. making a presentation at a Food for Thought session or department meeting)
- A timetable for development, implementation and evaluation of the project

- Budget with Justification (see attached)
  Allowable costs may include:
  - Faculty compensation, which will be funded as a stipend and has generally been limited to $3,000 or less for worthy projects
  - Student hourly wages (not tuition)
  - Software or hardware
  - Fees for an assessment consultant, typically on the order of $500

Questions about the program can be addressed to any of the following individuals:

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Kate Beverage
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