



Application for Professional Development Grant in Internationalization



*Brought to you by the Internationalization Steering Committee (ISC),
part of the Internationalization Initiative at PCC*

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Campus: Sylvania

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(number that will work during campus closure)

Check one: ☒ FT faculty • ☐ PT faculty

- Projects can be modification of course materials, new course materials, or another project that adds an internationalization component or international focus to a course. We encourage you to be creative!
- Award amounts are expected to be between \$500 and \$1000, depending on the complexity of the project, the potential benefit for students, and the potential for use by multiple courses or instructors.
- Submissions become property of PCC and may be used as examples for future grant applications, on the PCC website, or otherwise shared inside or outside of PCC.
- Applicants will be expected to present about their project at a future meeting, to be determined in collaboration with the ISC (Internationalization Steering Committee).
- Applications will be reviewed and awards determined by members of the ISC.
- Applicants who are selected for an award will be asked to sign a MOU (Memorandum of Understanding). Payments will be made after the project is completed and a final report is submitted.
- All work must be completed by the start of Fall term 2020 (September 21).

Please answer the questions on the next page. Add extra space or additional pages as needed.

1. Title of project

Site Planning (ARCH 113) internationalization: how do other countries site buildings in response to climate change and rising sea levels?

2. Description of project (about 200-500 words).

The course description from the syllabus is:

Covers site development, including surveying existing grades, locating existing and future buildings, locating driveways, controlling erosion, managing stormwater and drawing site plans.

The course outcomes from the existing ARCH 113 syllabus are three-fold:

- Interpret information obtained from site plan drawings and apply to design projects
- Construct site plan drawings using raw site information and site survey data
- Apply basic concepts of site water management and erosion control and communicate strategies and requirements to clients and consultants

All of this has been well and good for our Portland- Oregon- US bubble for many years. It still has value. But we can learn so much from what other parts of the world are doing; every culture has to respond to a warming climate, to an increase in frequencies of storms and weather catastrophes, and to the impact of those on natural systems. Including the lands we build upon.

So here's what I'm interested in: exploring how western Europe has managed to achieve a high population density yet still conserve natural systems and build a modern infrastructure largely immune to the sorts of things we see in the US: landslides, flooding, depletion of natural resources, inefficient infrastructure and wasteful land use.

The question is: how can we incorporate forward thinking into our site planning? The answer is to study what's happening internationally.

My intention is to expand my use of case studies from the US (Portland, Bend, New Orleans) to include some from western Europe (Scandinavia, Germany, Switzerland, Slovenia, Croatia). I've got ample documentation from a recent trip to those nations and would like to expose my students to systems that are succeeding elsewhere.

Students work individually on 7 drawing assignments in ARCH 113: 3 of these involve calculating stormwater runoff and designing systems to retain and store this runoff. Seeing how western Europe has done it (think of the Dutch system of dikes and levees) would help their outputs. Also, as storms have become more frequent and intense, we've had to revamp our decades-old metrics for calculating water volume, and our codes are generally 5-10 years behind actual conditions in the US. So we have to see how other nations are addressing the here and now.

The final project entails laying out the design of a site they'll each use for their Capstone projects in the subsequent ARCH 201: they will be asked to work in small groups, exchanging ideas and concepts.

3. Please provide a brief answer to each of the following:

a. What is it you hope to gain from completing this project? How will it benefit your students?

My hope is to expand my students' worldviews to, at minimum, be aware that the 'typically American' way of doing things is just one option. Beyond that, there's some really cool stuff being done in western Europe and around the world! My guess is our students would be thrilled to learn about things like cities that co-exist, rather than conflict, with natural systems, smart/flexible building design immune to floods and emergency structures without foundations that can quickly and efficiently shelter refugee populations. Because none of these things seem like far-off, apocalyptic visions anymore. And understanding the capacity of architecture to reflect the world it's built in seems to me a key ingredient in learning the profession.

b. Is this project replicable? (preference will be given to projects that can be used in more than one course or by more than one instructor). Please explain.

Our small CTE program has historically undershared what it does with other PCC programs. This silo-ism needs to be addressed. I would hope this is an effort in that direction. Certainly, this project incorporates civil engineering, and I have had CMET faculty as guests in my Site Planning classes in the past. Any work that studies natural and manmade systems and calculates stormwater runoff would be of interest to CMET as they look to reboot the focus of their program in the 2020-21 cycle. Specifically, these are 2 to 3 slide shows and the outlines and specifics of 3 of the 7 course assignments: that's what I expect to be revising once I incorporate the new 'international' material. These are in PDF form.

Since we use Autocad in the course, there is also an overlap with the Drafting (CADD) program. I'm happy to share the how-tos of civil drafting with them; I have step-by-step directions, with visuals, in PDF form. (It's a different language than what architecture students are used to, namely drawing distances in x.xx' and bearing angles in degree/minute/second format). And within our Architecture program, this Site Planning course is probably THE critical prerequisite for our second-year studios...meaning any improvements to this course will impact others. So an increased exposure to internationalization in Site Planning stands to benefit these subsequent Architecture courses: ARCH 201 (Residential Studio), 202 (Commercial Studio), 203 (Residential Remodel Studio), 204 (Green Residential Studio) and 224 (Active and Passive Building Systems); in this final course, we have a stand-alone unit on climate change in Week 1.

c. How would you be able to share what you have done with other faculty at PCC?

Following is an overview of products I'll be creating for the course:

- Course syllabus (which admittedly doesn't list specific modules or assignments and won't reflect this internationalization effort directly)
- Course overview and calendar; this does, and 2-3 lecture topics will need to be updated.
- Class assignments: 3 assignments are directly impacted
- Instructor presentations (Kaltura Capture videos posted onto D2L; these include slide shows in PPTX and PDF form)
- Relevant articles (posted for students as PDFs on the course home page)

The method of sharing this info is twofold: either directly via e-mail to colleagues in my SAC or other CTEs, and by posting any of the above resources on D2L, including beyond the CTE-level for the ISC (internationalization steering committee).

I am willing to present any of the above at an internationalization event, as I've done in the past with my ARCH 131 (Sustainable Building Strategies) course.

d. Is there anything in your background or experience that will help you to accomplish this project?

I've been a practicing architect for 25 years, with ample experience abroad. So I can't help but bring passion for the subject. There is value in being able to present my built projects to students, and having gone through the siting and construction process on so many past projects lends me a certain credibility.

My own passion for non-Americentric design and building systems has led me to accumulate a good amount of knowledge about how things are done in other parts of the world. Given the pandemic and its likely far-reaching impacts on our profession and beyond, I can recall no better time than now to infuse my coursework with lessons such as these.

Please email your completed application to: Ron Bekey, ISC Chair, rbekey@pcc.edu by Friday May 22, 2020 at midnight.