

## University of Washington Restoration Ecology Network (UW-REN)

### Restoration Ecology Capstone 2016 - 2017

#### Information for Prospective Students – Spring 2016

#### **Capstone Description**

The UW-REN Restoration Ecology Capstone is a 3-quarter sequence of courses where students of different academic backgrounds work with a real-life client to design and complete an actual restoration project. Students can expect to learn about planning, design, project management, installation, maintenance and monitoring of a restoration project. These projects are accomplished in a realistic context, with students working on a team with peers from different academic and experiential backgrounds, and having the student team work closely to meet the needs of a real client.

#### **Capstone Course Philosophy**

As a capstone course sequence, the experience is specifically designed to utilize knowledge and skills that a student has accumulated from previous coursework and personal experience. Students will learn to employ scientific knowledge and principles in the course of accomplishing a real ecological restoration. Capstone students are expected to be highly capable and self-motivated in accomplishing tasks, working independently, and applying prior knowledge to new challenges. Although some information on restoration approaches is presented in fall quarter, many new situations will arise in restoration projects that will require students to be assertive about pursuing knowledge and ultimately, solutions, in an independent fashion. UW-REN instructors will meet regularly in classroom and in the field with students to provide guidance and oversight, but these courses demand considerable initiative on the part of the students.

#### **Capstone Sequence Synopsis**

**The synopsis below is a summary of the capstone as it has been run for most of the past 16 years. See note on “Credits & Course Sequence” below this section for a description of changes for next year.**

##### **Fall Quarter (2 credits) : Restoration Tools, Learning from the Past, Project Organization**

UW-REN instructors and guests present seminars on important tools for accomplishing restoration projects (e.g., horticulture, weed management, grant writing, using volunteers, soils & amendments, plant selection, etc.). Field trips are taken to past projects to learn about successes and challenges. Student restoration teams are formed by the instructors and teams are assigned a project based upon the ranked preferences of each team for the possible projects and other criteria. Student teams are provided with their client's Request-for-Proposal (RFP – a request by the client for the team to develop a proposal for a project they need accomplished) and often make initial site visits and meet their client.

##### **Winter Quarter (3 credits) : Project Proposal, Work Plan, Site Preparation**

Following a site analysis, student teams develop a proposal in response to their client's RFP. The proposal is reviewed by peers and instructors before submission to the client for approval. Often some negotiation with the client is required before a proposal is accepted. Following proposal acceptance, detailed work plans are developed by the team, which are reviewed by instructors and submitted to the client for approval. Often student teams will be active in site preparation during winter quarter.

##### **Spring Quarter (5 credits) : Project installation, stewardship (maintenance & monitoring) plan**

In spring quarter, student teams complete site preparation and the installation of the project. This is usually done in conjunction with volunteer labor that the student team is responsible to train and oversee. An as-built report is required to describe changes that occurred during installation that were not anticipated in the work plan. Student teams also prepare a stewardship plan and train clients to enhance long-term project success. The

experience is concluded with an evening symposium, during which the student teams present their completed projects to their clients, as well as prospective future clients and students, and other individuals and organizations interested in restoration.

Synopses of past capstone projects and current project information can be accessed through links on the UW-REN home page: <http://depts.washington.edu/uwren>

## **Capstone Sequence Structure & Considerations**

### **Note for Credits & Course Sequence in 2016-17**

The structure of the capstone courses has been significantly revised over recent years. We have been improving the courses based upon years of accumulated experience with many projects and students. Experience has shown the value of starting these projects as early as possible. Thus, we will be accelerating our schedule compared to past years (proposals will be completed fall quarter). This means that the work load may be higher in fall and winter quarters and less in spring quarter than it has been in the past. For administrative reasons we are leaving the sequence as 2 credits (fall) – 3 credits (winter) – 5 credits (spring) for the time being. The overall work load will not change – just the distribution through the academic year. You may wish to consider this when registering for other courses (that fall and winter work loads will be more than the assigned credits and spring will be less).

### **Tri-Campus Structure**

The UW-REN capstone is unique in the University of Washington system in bringing students together from all three campuses (Bothell, Seattle, Tacoma) across a variety of academic departments to work together on common projects. Students will have an opportunity to work with peers of different backgrounds.

### **Background & Registration**

We highly encourage students to take at least one course in basic restoration ecology prior to the capstone sequence. Courses that meet this include: BES 362 (Bothell campus); ESRM 362, 473 (Seattle campus); TESC 362 (Tacoma campus). We will expect students participating in the capstone to have had exposure to the kind of material addressed in these courses. Sometimes other experiences or courses can meet this need. Contact the UW-REN program coordinator or one of the co-directors for specific questions (contact information below).

Students should register for the capstone courses using the class designation for their campus:

Campus	Fall Quarter	Winter Quarter	Spring Quarter
Bothell	BES 462	BES 463	BES 464
Seattle	ESRM 462	ESRM 463	ESRM 464
Tacoma	TESC 462	TESC 463	TESC 464

UW Bothell students will get their Fall 2016 Add Code from the UWB course instructor (Warren Gold) after you have completed a meeting with him in Spring 2016.

The capstone is specifically designed as a 3-course sequence. There are a limited number of students that can be accommodated from each campus. Thus, **you should not register for this capstone unless you are intending to complete the entire sequence of courses.** Otherwise you will eliminate the opportunity for a fellow student and create major problems for your restoration project team.

### **Meeting Location**

Because of its tri-campus nature, the UW-REN capstone course meetings are held in a somewhat geographically central location: the Center for Urban Horticulture (CUH) at UW Seattle. CUH is located and just east of the central portion of the Seattle campus, has free parking and is generally easier to access than the central part of the Seattle campus. We meet in the Douglas classroom at CUH (not at UWB).

### **Course Scheduling**

For all three quarters in 2016-17, the official class time will be 1:00 – 2:50 PM every Friday. During Fall Quarter, students will likely be expected to attend each class and 2 additional Saturday field trips (including the second Saturday of the quarter). The class meetings during winter and spring quarters are considerably more flexible. During those quarters, instructors meet with student teams 3-4 times a quarter for about 15 minutes each time to review the team's progress and challenges. Those meetings usually take place sometime in the window of the designated class time, at a time chosen by the team based upon the availability of team members. Often, class conflicts at the designated class time can be accommodated during Winter and Spring Quarters (see instructors for more specific details).

### **Grading**

Fall, Winter, and Spring quarters are primarily graded based upon the products that each restoration team produces (proposal, work plan, as-built report, maintenance and monitoring manual, installation, etc.). These are team products and thus each student's raw grade for the quarter is based upon the grades assigned to these team products (i.e., all team members receive the same raw grade for those products). These raw grades are modified (usually to a minor degree) based upon peer evaluations to account for unusually high or low levels of participation and contribution by individual students to the team's products. **Students should be comfortable with this grading approach before deciding to participate in this capstone!** Note that UW Seattle students do not officially receive grades for any of the courses until all three courses in the sequence are completed (though we can tell you what those grades will be at the end of each quarter).

### **Course Fees**

The course fee for each quarter of the capstone sequence is about \$50. This fee provides funds for field trip transportation, the production of posters for the spring poster session, and a variety of materials and costs incurred in the course of the restoration project. Such costs are project-specific and may include plants, soil amendments, and the production of educational materials. Course fees have been set at a uniform rate throughout the three-quarter sequence in order to take full advantage of opportunities for procuring needed materials that may arise at various times through the year.

### **For Further Information**

#### **UW-REN Co-Directors:**

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