



Section 1. Proposed Course Outline (A general statement of course content that informs class syllabus construction. Once approved, all sections of a given course must include this content, no matter which instructor teaches the course, or the mode of delivery. Divisions must include this new course outline in the Divisional Course Outline binder as required by COPPs.)

Course Number: **WST 225** Full Course Title for print catalog: **Riparian Field Methods**

Abbreviated Course Title for Banner: **Riparian Field Methods** (30 character limit)

Prerequisites: ENVS181, WST205(both C- or better) or Instructor consent.

Co-requisites: None

Grade Option: Graded (with P/NP option) Pass/No Pass only

Number/Type Credits	Term Minimum Contact	Term Maximum Contact	11-Week Term Contact
0 Lecture	0 hours (lecture credits x 10)	0 hours (lecture credits x 12)	0 hours (lecture credits x 11)
2 Lec/Lab	40 hours (lec-lab credits x 20)	48 hours (lec-lab credits x 24)	44 hours (lec-lab credits x 22)
0 Lab	0 hours (lab credits x 30)	0 hours (lab credits x 36)	0 hours (lab credits x 33)
2 Total credits (sum)	40 Total hours (sum)	48 Total hours (sum)	44 Total hours (sum)

Course Description (300 character limit):

Fundamental skills to describe the condition of riparian systems. Vegetation identification. Habitat assessment of stream-side plants, animals, and macroinvertebrates. Execution of standard riparian protocols. Field data collection on evenings and/or weekends combined with online learning.

Course Outcomes and Proficiencies

What will the student *know* or *be able to do* at the end of the course?

What *attitudes* related to the subject will the student hold?

Upon successful completion of this course, the student will:

Complete a riparian survey protocol within defined quality standards

Infer important processes acting at a particular riparian site based on site observations including erosion, stream flow, habitat types and species present

Classify native and invasive species, stream types, soil types, habitat types, and potential disturbance or pollution sources in a riparian environment

Implement basic field standards for the WST program, including use of skills, tools and interpretation of measurements in the

Assessments Planned

What evidence will demonstrate that students have achieved course outcomes? (assessment tools may include departmental tests, written products, portfolios, juried performances, quizzes and exams, or alternative assessments such as qualitative studies, capstone projects, external reviewers, etc.)

How each outcome will be assessed:

Demonstrated proficiency in independent completion of all components of the protocols

Field activities, field journal, practical testing, written report, written/online quiz

Field activities and practical testing

Field journal, scenarios, written reports or online quiz, practical testing

performance of a riparian assessment protocol	
Summarize best management practices commonly used to create or preserve healthy watersheds which may be appropriate at a given site	Field journal, scenarios, written reports or online quiz, practical testing
Communicate clearly with peers, supervisors, and the general public about watersheds and watershed practices	Data compilation, written reports, online quiz, and practical activities
Effectively utilize appropriate supplementary resources and research for survey completion and compilation	Data compilation, written reports, online quiz, and practical activities

Course Content by Major Topics

What topics will be presented? What are the main activities of the course? What are the central themes? (See sample at <http://www.lanec.edu/cops/format3.htm>.)

Topics:

In following a program accepted protocol, content will be covered at the depth necessary for a field technician to complete an industry provided project or scenario;

Goals and types of riparian surveys.

Riparian classification systems.

Methods to control data quality by field personnel.

Streamside ecological processes commonly measured in riparian areas.

Identification and measurement of common riparian species, habitat types, ecological boundaries, and disturbance types.

Water quality and flow attributes referred to in riparian surveys.

Structuring and reporting survey results as a part of larger regional data-gathering efforts.

Riparian best management practices.

Review of basic field operations and safety.

Section 2. Proposal Information

Course Developer:

Paul Ruscher,
Stephen Clarke

Date: 03/05/2013

Catalog year to take effect:
2013-14

Type of Proposal

New course

Currently 199 or 299

Experimental Course

199 Special Studies

299 Trends

Revised course (If increasing credits, use credit change form)

Reactivated course with no change

Reactivated course with changes

Type of Course:

Lower Division Collegiate (transfer)

Professional/Technical (required or elective)

Developmental, numbered below 100

Rationale:

How does this proposal further the goals of the program or department?

This is a required second-year course of the new Watershed Science Technician program and provides training in industry-standard field methods appropriate for watersheds.

What assessment evidence supports this proposal?

This course is part of the new required WST curriculum, developed by our science faculty with input from our external Watershed Science Advisory Committee. The course teaches learning outcomes identified by industry experts.

How do you know there is a demand for this course?

This is required by the WST program. The course will serve CT students in the program and may also serve others seeking field skills in this area.

Section 3. Curriculum Equity (<http://www.lanecc.edu/cops/curric.htm>)

To promote an environment where all learners are encouraged to develop their full potential, this course will support Lane’s Curriculum Equity policy in the following way(s):

Use gendered examples equally when illustrating theories and concepts.

Use research sources, graphics, videos, and other media that portray women and men from diverse cultural and ethnic backgrounds in roles related to the science and field studies.

Use gender-neutral terms such as people, human, you, they wherever possible and alternate genders where this is not possible.

Section 4. For revised courses only: PREVIOUS Catalog/Course Information:

Course Number: _____ Course Title in Banner: _____ (30 characters maximum)

Full Course Title in print catalog:

Prerequisites:

Co-requisites:

Grade Option: Graded (with P/NP option) Pass/No Pass only

Number/Type Credits	Term Minimum Contact	Term Maximum Contact	11-Week Term Contact
__ Lecture	__ hours (lecture credits x 10)	__ hours (lecture credits x 12)	__ hours (lecture credits x 11)
__ Lec/Lab	__ hours (lec-lab credits x 20)	__ hours (lec-lab credits x 24)	__ hours (lec-lab credits x 22)
__ Lab	__ hours (lab credits x 30)	__ hours (lab credits x 36)	__ hours (lab credits x 33)
__ Total credits (sum)	__ Total hours (sum)	__ Total hours (sum)	__ Total hours (sum)

Course Description:

What will change? Course Number Title Course Description Credit hours Contact hours

Section 5. Support Courses (New Professional/Technical course proposals must complete.)

Professional/Technical courses are tracked within programs for purposes of Carl Perkins funding and budgetary planning. Indicate all degree or certificate programs for which this course will be required.

Program	Division
Watershed Science Technician	Science

Section 6. Overlap Courses (New course proposals must complete.)

While overlap of course materials is not necessarily a flaw, duplication of course materials may lead to inefficient use of college resources. If there is overlap, the faculty of overlapping courses must agree on the extent of overlap and attach a rationale explaining its necessity.

Indicate all departments/courses that this course may overlap. Division Dean of existing course enters one of two options at right. Note: N/A is not an option.

Options:
 1. Approved: overlap is acceptable. Rationale attached.
 2. Disapproved: reasons attached.

Division	Course Number / Title	% Overlap	Option	Division Dean of existing course (Signature required for all options)	Date
Science	BI 103F	5%	1		
Science	ENVS 181	5%	1		
Science	ENVS 183	5-10%	1		
Science	WST 205	5%	1		
Science	GS 102	5%	1		
Science	WST 226	5%	1		

Section 7. Qualification to fulfill degree requirements (complete all relevant forms, available at <http://www.lanecc.edu/currshed/drrcforms.htm>, and send to Mary Brau for the Degree Requirements Review Committee):

Form(s) applying for the following degree requirement status have been attached. (Only check this box when forms have been completed and attached.)

AAOT, ASOT-Bus, OTM:

- Arts & Letters
- Social Sciences
- Science / Mathematics / Computer Science

AAOT:

- Ethnic/Gender/Cultural Diversity

AAS, 1-year and 2-year certificates:

- Human Relations

