

**BAE 579: Stream Restoration**  
**Department of Biological & Agricultural Engineering**  
**Spring 2008 – 3.0 Credit Hours**

---

**Instructor:** Dr. Greg Jennings, Professor & Extension Specialist  
**Office:** 210A Weaver Labs  
**Email:** jennings@ncsu.edu

**Office Hours:** By appointment. Please email in advance.

**Class Meetings:** 142 Weaver Labs: Fridays 9:00am – 4:00pm

**Course Prerequisites/Restrictive Statements**

This course is open to graduate students with courses in hydrology and hydraulics.  
Undergraduate students may take this course with permission from the instructor

**Goals and Objectives of the Course**

This is an applied engineering course with the focus on developing skills for professional engineers in designing and evaluating stream restoration projects. We will work in small groups on a semester project to design a stream restoration plan for a local stream. This will require field data collection and AutoCAD plan development.

**Text**

Leopold, Luna B., Wolman, M.G., and Miller, J.P., 1964, Fluvial Processes in Geomorphology, San Francisco, W.H. Freeman and Co., 522p.

Recommended Reference Materials:

1. Applied River Morphology. 1996. Rosgen.
2. A View of the River. Leopold
3. Environmental Hydrology. 2003. Ward and Trimble.
4. Fluvial Forms and Processes: A New Perspective. Knighton
5. Water in Environmental Planning. Dunne, Leopold
6. Applied Fluvial Geomorphology for River Engineering and Management. Thorne (Editor)

Reference materials and Powerpoints will be posted on the instructor's homepage:

<http://www.bae.ncsu.edu/people/faculty/jennings/>

## Class Attendance

Full participation in class is expected of all students. **Attendance and promptness are expected.** One excused absence or tardiness will be permitted. Each additional absence will result in a five-percentage point deduction from the final course grade. Each additional tardy will result in a two-percentage point deduction from the final course grade. Please see [http://www.ncsu.edu/provost/academic\\_regulations/attend/reg.htm](http://www.ncsu.edu/provost/academic_regulations/attend/reg.htm) for NC State University attendance regulations including a description of excused absences.

## Grading

This course will follow NC State University Policy on grading. Late assignments will not be accepted unless previously approved. There will be 8 class assignments that comprise 50% of the final grade. There will be one final design project that will comprise 50% of the final grade. Questions about grades must be made within one week of the return of the assignment.

## Grading Scale

A+ >98	B+ 87 – 89.9	C+ 77 – 79.9	D+ 67 – 69.9	F <60
A 93 – 97.9	B 83 – 86.9	C 73 – 76.9	D 63 – 66.9	
A- 90 – 92.9	B- 80 – 82.9	C- 70 – 72.9	D- 60 – 62.9	

## University Policies

All NC State University policies can be found at the following web page:

[http://www.ncsu.edu/provost/academic\\_policies/index.html](http://www.ncsu.edu/provost/academic_policies/index.html).

One of these policies is reprinted below for your convenience:

### **Instructor's Academic Integrity Statement**

1. North Carolina State University requires that all students abide by the Code of Student Conduct. For a complete statement of this policy and consequences of violation of this Code, please see [http://www2.ncsu.edu/prr/student\\_services/student\\_conduct/POL445.00.1.htm](http://www2.ncsu.edu/prr/student_services/student_conduct/POL445.00.1.htm)
2. The students and faculty of NC State University believe that the willingness of students to affirm and adhere to the essential values of honesty and integrity in all their academic endeavors is exemplified in the Honor Pledge: **I have neither given nor received unauthorized aid on this test or assignment.** It is this instructor's understanding and expectation that the student's signature on any test or assignment means that the student neither gave nor received unauthorized aid.
3. The instructor will not tolerate plagiarism or cheating. Violators will be subject to sanctions as described in the Code of Student Conduct.