Proposal Form For Addition And Revision Of Courses

1. Proposing College / School: Engineering
   Department: Civil Engineering

2. Course Prefix and Number: CIVL 4230

3. Effective Term: Spring 2012

4. Course Title:
   Urban Hydraulic System Design
   Abbreviated Title (30 characters or less):
   Urban Hydraulic System Design

5. Requested Action:
   - [ ] Renumber a Course
   - [ ] Add a Course
   - [ ] Revise a Course
   - [ ] Current Course Number:
   - [ ] Proposed Course Number:
   - [ ] Type of Revision: Prerequisite

6. Course Credit:
   - Contact/Group Hours:
   - Scheduled Type:
     - Lecture
   - Weekly or Per Term?
     - Credit Hours:
     - Anticipated Enrollment: 40
   - Maximum Hours (Repeatability): 3
   - Total Credit Hours: 3

7. Grading Type:
   - [ ] Regular (ABCDF)
   - [ ] Satisfactory/Unsatisfactory (S/U)
   - [ ] Audit

8. Prerequisites/Corequisites:
   P: CIVL 3110 and CIVL 3230

9. Restrictions: List specific restriction in space above.
   - [ ] College
   - [ ] Major
   - [ ] Standing
   - [ ] Degree

10. Course Description:
    (20 Words or Less; exactly as it should appear in the Bulletin)
    Engineering approaches to designing and managing urban water supply, sanitary sewer, storm water collection systems and flood control works.

11. May Count Either:
    (Indicate if this particular course cannot be counted for credit in addition to another)
    [ ] Program Type
    (e.g.: minor, major, etc.)
    [ ] Program Title
    (e.g.: MS in Chemistry, Performance Option, Minor in Art)
    [ ] Requirement or Elective?
    (required or optional?)

12. Affected Program(s):
    (Respond "N/A" if not included in any program; attach memorandum if more space is required)
    - Major
    - Civil Engineering
    - Elective

13. Overlapping or Duplication of Other Units' Offerings:
    (If course is included in any other degree program, is used as an elective frequently by other unit(s), or is in an area similar to that covered by another college/school, attach correspondence with relevant unit)
    - [ ] Applicable
    - [ ] Not Applicable
14. Justification: 

This applied hydraulics course requires an understanding of basic hydraulics.

(Include a concise, yet adequate rationale for the addition/revision of the course, citing accreditation, assessments (faculty, graduate, and/or external) where applicable)

15. Resources: 

Course is currently being taught. No additional resources required.

(Indicate whether existing resources such as library materials, classroom/laboratory space, and faculty appointments are adequate to support the proposed addition/revision; if additional resources are required, indicate how such needs will be met, referencing the appropriate level of authorization – i.e.: Dean – where necessary; if no additional resources or shifting of resources will be necessary, respond “Not Applicable”)

16. Student Learning Outcomes: 

See attached: Objectives.

(State in measurable terms (reflective of course level) what students should be able to do when they have completed this course)

17. Course Content Outline: 

See attached.

(Provide a comprehensive, week-by-week breakdown of course content, including assignment due dates)

18. Assignments / Projects: 

See attached.

(List all quizzes, projects, reports, activities and other components of the course grade – including a brief description of each assignment that clarifies its contribution to the course’s learning objectives)

19. Rubric and Grading Scale: 

See attached.

(List all components of the course grade – including attendance and/or participation if relevant – with point totals for each; indicate point totals and ranges or percentages for grading scale; for S/U grading, detail performance expectations for a passing grade)

20. Justification for Graduate Credit: 

N/A

(Include a brief statement explaining how the course meets graduate educational standards (i.e.: rigorous standards for evaluation, development of critical thinking and analytical skills, etc.))

(Included below are standard statements regarding course policies. If necessary, a statement may be altered to reflect the academic policies of individual faculty members and/or the academic unit or department, provided that there is no conflict with the Tiger Cub, Faculty Handbook, or any existing university policy.)

**POLICY STATEMENTS**

**Attendance:** Although attendance is not required, students are expected to attend all classes, and will be held responsible for any content covered in the event of an absence.

**Excused Absences:** Students are granted excused absences from class for the following reasons: illness of the student or serious illness of a member of the student’s immediate family, the death of a member of the student’s immediate family, trips for student organizations sponsored by an academic unit, trips for university classes, trips for participation in intercollegiate athletic events, subpoena for a court appearance, and religious holidays. Students who wish to have an excused absence from class for any other reason must contact the instructor in advance of the absence to request permission. The instructor will weigh the merits of the request, and render a decision. When feasible, the student must notify the instructor prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence. Appropriate documentation for all excused absences is required. Please see the Tiger Cub for more information on excused absences.

**Make-Up Policy:** Arrangement to make up a missed major examination (e.g.: hour exams, mid-term exams) due to properly authorized excused absences must be initiated by the student within one week of the end of the period of the excused absence(s). Except in unusual circumstances, such as the continued absence of the student or the advent of university holidays, a make-up exam will take place within two weeks of the date that the student notifies the instructor of the absence. Except in extraordinary circumstances, no make-up exams will be arranged during the last three days before the final exam period begins.

**Academic Honesty Policy:** All portions of the Auburn University student academic honesty code (Title XII) found in the Tiger Cub will apply to university courses. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

**Disability Accommodations:** Students who need special accommodations in class, as provided for by the Americans With Disabilities Act, should arrange for a confidential meeting with the instructor during office hours in the first week of classes (or as soon as possible if accommodations are needed immediately). The student must bring a copy of their Accommodation Letter and an Instructor Verification Form to the meeting. If the student does not have these forms, they should make an appointment with the Program for Students with Disabilities, 1288 Haley Center, 844-2006 (V/TT).
CIVL 4230
URBAN HYDRAULIC SYSTEM DESIGN
Spring 2011

Instructor: Dr. Clifford R. Lange
Office: 206 Harbert Engineering Center
Telephone: 844-6275

Objectives: After completion of the course, the student should have an understanding of:

1. Estimation of demands for water and sewer capacity.
2. Estimation of storm-water flows.
3. Steady state open channel and closed conduit hydraulics
4. Water distribution and sewage collection systems
5. Storm-water detention pond design
6. Pumping of water and storm-water

Grading Policy:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Mid-Term Examinations (2)</td>
<td>50%</td>
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<tr>
<td>Homework</td>
<td>10%</td>
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<tr>
<td>Design Project</td>
<td>10%</td>
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<tr>
<td>Final Examination</td>
<td>30%</td>
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</tbody>
</table>

- Late homework will not be accepted.
- Missed examinations cannot be made-up without a written doctor’s excuse or previous consent of the instructor.
- On days of poor attendance, surprise quizzes may be given.
- Final grades are non-negotiable:

90-100                     A
80-89.9                    B
70-79.9                    C
65-69.9                    D
0-64.9                     F

- Requests for regrading of exams, projects, or homework must be made within one week of their return.

- No help will be given on homework or projects on the due date.
## CIVL 4230
### URBAN HYDRAULIC SYSTEM DESIGN

<table>
<thead>
<tr>
<th>CLASS</th>
<th>TOPIC</th>
<th>HOME WORK</th>
<th>READINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction/Hydrologic cycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-5</td>
<td>Review of Applied Hydraulics</td>
<td>HW #1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Handout</td>
<td></td>
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<td>6</td>
<td>Water Transmission Mains</td>
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<td>7-9</td>
<td>Water Distribution Systems</td>
<td></td>
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<td>10-11</td>
<td>Wastewater Sources and Flows</td>
<td>HW #3</td>
<td>Handout</td>
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<td>12-14</td>
<td>Sewer Hydraulics</td>
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<td>15</td>
<td>Examination One (lectures 1-6)</td>
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<td>16-18</td>
<td>Sanitary Sewer Systems</td>
<td>HW #4</td>
<td>Handout</td>
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<td>19-23</td>
<td>Forces on Sewers &amp; Pipe Materials</td>
<td>Hw #5</td>
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<td>24-28</td>
<td>Hydrology</td>
<td>HW #6</td>
<td>Read Chapter 2</td>
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<td>29-34</td>
<td>Gutters and Inlets</td>
<td>HW#7</td>
<td>Read Chapter 6.1</td>
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<td>35</td>
<td>Examination Two (lectures 7-15)</td>
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<td>Read Chapter 6.2</td>
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<td>36-38</td>
<td>Storm Sewer Design</td>
<td>HW #8</td>
<td>Read Chapter 6.3</td>
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<td>39</td>
<td>Culvert Design</td>
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<td>40-41</td>
<td>Detention Ponds</td>
<td>HW #10</td>
<td>Read Chapter 7</td>
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<td>42-43</td>
<td>Storm water Quality &amp; Treatment</td>
<td>HW #11</td>
<td>Read Chapter 9</td>
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