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CURRICULUM PROPOSAL FORM 2001-2002

NON-GENERAL EDUCATION PROCESS A

***DEADLINES:** Deadline dates for 2001/2002 submissions: Regular proposals: October 19, 2001 to be implemented in Fall 2002; Short-Term proposals: December 7, 2001 to be implemented in Fall, 2002; Regular proposals February 15, 2002 to be implemented in Spring, 2003; March 22, 2002 for short-term courses to be implemented in Spring 2003.

PROPOSAL TITLE: Site Remediation Engineering *C405-522*
name change

SPONSOR(S): Jess W. Everett (x5326)

DEPARTMENT: Civil and Environmental Engineering

COLLEGE: Engineering

IF LAS CHECK ONE: History/Humanities Math/Sciences Social/Behavioral Sciences

Check one: Undergraduate Graduate

THE ATTACHED *NON-GEN-ED* PROPOSAL IS BEST DESCRIBED BY THE ITEM(S) CHECKED.

New non-gen-ed course

Short-term non-gen-ed course

Minor curricular changes (fewer than three) to:

existing non-gen-ed course

non-gen-ed degree requirements

major

minor, specialization, concentration, track, certificate program

DEPARTMENT
(Signature indicates approval)

Danilo P. ... 2/15/02
Dept. Curriculum Chair / Date

Kenneth ... 2/15/02
Dept. Chairperson / Date

ACADEMIC DEAN

Approved Not Approved

Comments: *No additional resources in excess of base budget funding are required.*

Dean's Signature/Date *Deanne ... 4/22/02*

COLLEGE CURRICULUM COMMITTEE

Date of open hearing (if necessary) 4/26/02 Approved X Not Approved _____
Comments:

Signature of College Chair/Date: Kevin D. O'Brien

UNIVERSITY CURRICULUM COMMITTEE

Date Received/Processed _____
Comments:

Curriculum Chair Signature [Signature] Date Announced At Senate 7/25/02
11/17/02

EXECUTIVE VICE PRESIDENT/PROVOST

Approved Not Approved _____ If no, reasons are as follows:

Student Credit Hours _____ Faculty Load Hours _____ Equalized Credit Hours _____

Official Copy & Approval Sheet Filed (Date): _____ Executive VP/Provost
Signature/Date [Signature] 11/17/02

REGISTRAR

Date Approved Course Description Received _____ Hegis Taxonomy & Course Number

Assigned 0705-522

Registrar Signature/Date [Signature] 11/15/02

NOTIFICATION FORWARD

Senate Curriculum Committee Chairperson Academic Dean(s) [Signature]
 Department Chairpersons Registrar [Signature]
Sponsor(s) Jim - 11-22-02

Course Proposal:

420

1. Details:

- a) Course Title: **Site Remediation Engineering (0908.522)**
- b) Sponsor: Dr. Jess W. Everett, Civil Engineering, x5326
- c) Credit Hours: 3 credit hours
- d) Course Level: Graduate (0908.522)
- e) Prerequisites: Graduate standing or permission of instructor.
- f) Suggested Time: One section during fall semesters in odd-numbered years
- g) Curricular Effect: None – This proposal modifies an existing course (Advanced Wastewater Treatment, 0908.522).
- h) Resources (No change from current course)
 - Faculty: Existing faculty can teach this course.
 - Library: Library acquisitions will be required.
 - Equipment: Existing laboratory facilities and equipment are adequate for this course.
 - Computers: Computer laboratory access will be required.
- i) Library Resources: Library acquisitions will be required at same level as current course.

2. Rationale:

Minor modifications to an existing course (Advanced Wastewater Treatment, 0908.522) are required because of proposed undergraduate curriculum changes (see curriculum modification proposal) that require changes to a senior level course taught simultaneously (Site Remediation Engineering Principles, 0908.422). See the Site Remediation Engineering Principles course proposal.

3. Essence of the Course

a) Objectives:

Upon completion of the course, students will be familiar with:

- Site Characterization
- Site Safety
- Modeling
- Feasibility Studies
- Remediation Design

b) Topical Outline:

The topical outline of the course may vary to some extent depending on the interests of the instructor and the students, and on advances in environmental engineering technology. The topics initially planned include:

- Introduction
 - Regulations
 - Fundamentals
- Site Characterization
 - Field Analysis
 - Laboratory Analysis
- Site Safety
- Modeling
- Feasibility Studies
- Remediation Design
 - Pump and Treat
 - Stabilization
 - Containment
 - Treatment Walls
 - Natural Attenuation and Bioremediation
 - Bioventing, Soil Vapor Extraction, and Air Sparging
 - Enhanced Bioremediation
 - Phytoremediation
 - Oxidation and other chemical treatments
 - Chemical Dehalogenation
 - In Situ Soil Flushing and Soil Washing
 - Soil Vapor Extraction and Air Sparging
 - Solvent Extraction

c) Evaluation and Grading Procedure of Students:

Student grades will be based on individual and/or group examinations, individual homework, design projects, and lab reports. In addition, students will complete a major research paper on an approved site remediation topic.

d) Course Evaluation:

The proposed course will be assessed based on student evaluations and curriculum review by engineering faculty.

4. Results of Consultations:

The proposed course is a minor modification an existing course entitled “Advanced Wastewater Treatment” (0908-522) which is part of the current Engineering Curriculum approved by the University Senate. Consultations were submitted with the original proposal as specified by the Curriculum Committee.

Catalog Description:

Site Remediation Engineering (0908.522)

Prerequisites: Graduate standing or permission of instructor.

(Offered fall semesters in odd-numbered years) Topics in site remediation engineering, including site characterization, site safety, modeling site conditions, conducting feasibility studies, and designing remediation systems, such as pump and treat, stabilization, containment, treatment walls, natural attenuation, enhanced bioremediation, phytoremediation, oxidation, soil flushing, and soil vapor extraction.

Cleary, Douglas B.

From: Everett, Jess W.
Sent: Wednesday, October 09, 2002 10:54 AM
To: Cleary, Douglas B.
Subject: FW: Consultations



TEXT.htm

Doug,

Will this do? If so I'll print the email and give it to you.

Jess

-----Original Message-----

From: Dahm, Kevin D.
Sent: Wednesday, October 09, 2002 10:50 AM
To: Everett, Jess W.
Subject: Re: Consultations

I am writing this letter in support of the several related curriculum proposals put forward last year by the Civil and Environmental Engineering department, refining their curriculum and consolidating the two parallel tracks into one. I will not attempt to comment on the proposals individually as I have already endorsed them as chair of the college curriculum committee. I am writing this letter simply to confirm that these changes were discussed at a chemical engineering department meeting and my department supports them unanimously. Chemical engineering students on occasion have interest in taking civil engineering courses as electives but these opportunities remain available with the proposed changes. The civil engineering students will be well served by these changes and we support their implementation.

Sincerely,
Kevin Dahm

Kevin Dahm
Assistant Professor of Chemical Engineering
Rowan University
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