ROWAN COLLEGE
CURRICULUM COMMITTEE

PROPOSAL TITLE: Advanced Reinforced Concrete

___UNDERGRADUATE x ___GRADUATE 3 _____CREDIT HOURS

SPONSOR(S): Ralph Alan Dusseau and School of Engineering Curriculum Committee

DEPARTMENT & TELEPHONE# Civil Engineering Program, School of Engineering

CHECK ONE: x COURSE __MINOR PROGRAM __CONCENTRATION __SPECIALIZATION

__ACHIEVEMENT CERTIFICATE __CERTIFICATION PROGRAM __MAJOR PROGRAM

STEP #1 (DEPARTMENT)

__APPROVED/DATE: 4-24-96

__NOT APPROVED/DATE:

DEPT. CURRICULUM CHR.

__REVIEWED/DATE: 4-24-96

DEPT. CHR.

STEP #2 (RECEIPT)

SCC# 96-97-19

DATE RECEIVED: SENATE

JUL 9

RECEIVED

SENATE CURRICULUM CHR.

STEP #3 (SCHOOL)

REVIEWED DATE: 4-12-96

✓ RECOMMEND TO APPROVE

__RECOMMEND NOT TO APPROVE

FORWARD FOR OPEN HEARING

✓ WITHOUT RESERVATIONS

__WITH RESERVATIONS

COMMENTS:

SCHOOL COMMITTEE CHR.

STEP #4 (ACADEMIC DEAN)

✓ RECOMMEND

__NOT RECOMMEND

__CONDITIONALLY RECOMMEND (SEE COMMENTS)

COMMENTS:

DATE & SIGNATURE, DEAN OF SCHOOL James R. Lacey 5/14/96

STEP #5 (SENATE CURRICULUM COMMITTEE)

DATE OF OPEN HEARING 10-28-96

APPROVED BY SENATE CURRICULUM COMMITTEE (DATE) 10/28/96

__RETURNED TO SPONSOR(S) FOR THE FOLLOWING REASONS:

STEP #6 (SENATE)

DATE PRESENTED TO SENATE 11/19/96 X APPROVED __NOT APPROVED

NOTIFICATION TO EXECUTIVE VICE PRESIDENT/PROVOST (DATE)

SENATE CURRICULUM COMMITTEE CHAIR SIGNATURE/DATE Ronald J Gosho

Course Proposal:

1. Details:

a) Course Title:	Advanced Reinforced Concrete
b) Sponsor:	Dr. Ralph Alan Dusseau and School of Engineering Curriculum Committee
c) Credit Hours:	3 credit hours
d) Course Level:	Graduate (0908.585)
e) Curricular Effect:	Elective course for civil engineering students
f) Prerequisites:	Structural Engineering I or permission of instructor
g) Suggested Time/ Scale of Implementation:	one section during fall semesters
h) Resources	Existing faculty in the School of Engineering can teach this course. Library acquisitions will be required.

2. Rationale:

The proposed course is an additional civil engineering elective that would supplement the Engineering Curriculum that was approved by the College Senate in December 1994. The proposed course is consistent with the establishment of the School of Engineering approved by the Board of Trustees in February 1995.

The fundamental theme of the course is the design of advanced reinforced concrete structures and structural components including two-way slabs, footings, retaining walls, shear walls, and slender columns.

3. Essence of the Course:

a) Objectives:

Upon completion of the course, civil engineering students will be able to design advanced reinforced concrete structures and structural components including the following:

1. Two-way slabs
2. Footings
3. Retaining walls
4. Shear walls
5. Slender columns.

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 engineering technology. The topics to be covered will include the following:

Two-Way Slabs:
- Slabs with Beams
- Flat Slabs
- Flat Plates

Footings:
- Wall
- Single Column
- Multiple Column

Retaining Walls:
- Gravity
- Semi-Gravity
- Cantilever

Shear Walls

Slender Columns

c) Evaluation and Grading Procedure of Students:

Student grades will be determined based on midterm and final examinations and homework assignments.

d) Course Evaluation:

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

4. Results of Consultations:

The proposed course is an additional elective that would supplement the Engineering Curriculum approved by the College Senate in December 1994. Consultations were submitted with the original proposal as specified by the Curriculum Committee.

Catalog Description:

Advanced Reinforced Concrete (0908.585)

(Prerequisites: Structural Engineering I or permission of instructor)

The fundamental theme of the course is the design of advanced reinforced concrete structures and structural components including two-way slabs, footings, retaining walls, shear walls, and slender columns.