Curriculum Committee,

Lab Courses:

The requested changes were discussed in a March and April department meeting in spring 2015. All members of the department were present and in agreement with the proposed changes. Three of the courses are laboratory courses that are associated with a particular class:

<table>
<thead>
<tr>
<th>Cave Course</th>
<th>Associated Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVE 3013 Engineering Materials Lab</td>
<td>CVE 3012 Civil Engineering Materials</td>
</tr>
<tr>
<td>CVE 3021 Soil Mechanics Lab</td>
<td>CVE 3020 Soil and Foundation</td>
</tr>
<tr>
<td>CVE 3033 Hydraulics Lab</td>
<td>CVE 3030 Fluids</td>
</tr>
</tbody>
</table>

All of these lab classes require the associated course as a corequisite, the labs can’t be taken before the course. All of the courses, CVE 3012, 3020 and 3030, are taught in the junior year. Two are taught in the fall and one in the spring. Many times students find the course load to be too heavy since lab classes take so much time. Some students choose to postpone a lab class until their senior year or summer when their loads are less demanding. The faculty do not have any issue with students delaying a lab course, it was the departments’ intention that they could do this. But, the registrar’s office has problems handing this and requires the students to get waiver forms when they have already completed the 3 hour course and are now trying to take the lab. Therefore we have decided to list the associated courses as a prerequisite or a corequisite.

Changing a Prequisite to Junior or Senior Standing:

Some prerequisite courses are truly a prerequisite, such as taking statics before structures. But other times we have listed prerequisites that basically require a student to follow an appropriate schedule of classes. CVE 4060 Transportation currently lists CVE 3020 Soils and Foundation as a prerequisite. But the topics covered in transportation are vehicle characteristics, geometric alignment, traffic analysis, queuing theories, signal timing, levels of service, traffic forecasting, and pavement and runway design. The only topics where soils would be helpful would be in pavement and runway design. The soils background necessary is bearing capacity which is covered in the transportation course any way. Therefore we want to change the prerequisite to senior standing.

A similar situation exists with CVE 3020 soils and foundation which lists CVE 3030 as a prerequisite. The topics covered in soils include engineering geology, index properties, classification, compaction, effective stress, permeability, consolidation, and shear strength as they relate to the design of foundations and retaining walls. Of these topics, the only one related to fluids is permeability which isn’t covered in the fluids class. Therefore we want to change the prerequisite to junior standing.

Catalog Change:

We are just switching the two classes, moving the environmental elective from fall of the junior year to spring of the junior year. Then moving the science elective from spring to fall of the junior year. The reason for the change is that many more of the science electives are offered in the fall. This change occurred when we added biological discovery, the whole earth course and oceanography to the list of courses that can be used as a science elective. The previous courses included meteorology, environmental geology and atmospheric environments.
**REQUEST TO CHANGE THE REQUIREMENTS FOR A COURSE**

Any change, addition or removal of any restriction, or change in credit hours or availability for a course requires this form, accompanied by any supporting documentation, be completed and approved as indicated below.

**COLLEGE** Engineering  
**DEPARTMENT** Civil

<table>
<thead>
<tr>
<th>REQUEST IS FOR CHANGE IN COURSE</th>
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<th>3</th>
<th>0</th>
<th>1</th>
<th>3</th>
<th>Engineering Materials Lab</th>
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</thead>
<tbody>
<tr>
<td>Prefix</td>
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</tr>
</tbody>
</table>

TO BE INCLUDED IN 20___/20___ CATALOG

Course changes are effective beginning with the fall term in which they appear in the University Catalog.

- **IS REQUEST FOR A CHANGE IN THE NAME LISTED ABOVE?**
  - Yes [ ] No [ ] If yes, requested name __________________________

- **IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?**
  - Yes [ ] No [ ] If yes, current credits __________ requested credits __________

- **IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?**
  - Yes [ ] No [ ] If yes, please check all that apply:
    - [ ] Add [ ] Remove [ ] Prerequisite [ ] Corequisite
    - [ ] Add [ ] Remove [ ] Prerequisite [ ] Corequisite
    - [ ] Add [ ] Remove [ ] Other Restrictions*

  *Other restrictions may include changing the grade mode (Y, F, S, A-I, ECI), designating a course already in the system, majors or cross-listed courses restricted to registration, or other restrictions.

CVE 3012 is currently listed as a corequisite, but many students wait to take the lab which is fine with the department. CVE 3012 should be listed as a prerequisite or a corequisite.

- **Approvals:**
  - Yes [ ] No [ ] Is this request for the course to be used to measure program-level student learning outcomes?
  - Yes [ ] No [ ] Is this request for the course to be to satisfy the scholarly inquiry requirement? If yes, attach "Q" materials for review.
  - Yes [ ] No [ ] Will this change impact any existing programs? If yes, attach "Changing Graduation Requirements" form for each program that is impacted.

**APPROVALS:** Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to the Catalog & Curriculum Manager.

1) **[Signature]** Howell Neck 4/9/15
2) **[Signature]** 4/9/15
3) **[Signature]** 4-20-15
4) **[Signature]** Chair, Graduate Council 4/9/15
   OR
   **[Signature]** Chair, Undergraduate Curriculum Committee 4-20-15

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<tr>
<th>SCACRSE</th>
<th>S'CADETL</th>
<th>SCAPREQ</th>
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<tr>
<td>SCABASE</td>
<td>S'CARRES</td>
<td>Operator Initials</td>
</tr>
</tbody>
</table>

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RGR:222-1114
Florida Institute of Technology

REQUEST TO CHANGE THE REQUIREMENTS FOR A COURSE

Any change, addition or removal of any restriction, or change in credit hours or availability for a course requires this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Engineering
DEPARTMENT: Civil

REQUEST IS FOR CHANGE IN COURSE: C V E 3 0 2 0
Number

Soil Mechanics
Course Title

TO BE INCLUDED IN 2016/2017 CATALOG
Course changes are effective beginning with the fall term in which they appear in the University Catalog.

IS REQUEST FOR A CHANGE IN THE NAME LISTED ABOVE?  Yes  No
If yes, requested name

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?  Yes  No
If yes, current credits requested credits

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?  Yes  No
If yes, please check all that apply:

☐ Add  ☐ Remove  ☐ Prerequisite  ☐ Corequisite
C V E 3 0 3 0
Number

☐ Add  ☐ Remove  ☐ Prerequisite  ☐ Corequisite
Number

☐ Add  ☐ Remove  ☐ Other Restrictions
If yes, please use box below:

*Other restrictions may include changing the grade mode (P/F, S/U, A-F, CCU), deactivating a course already in the system, majors or class levels restricted from registration, or other restrictions.
Requirement: Junior standing.

☐ Yes  ☐ No  Is this request for the course to be used to measure program-level student learning outcomes?

☐ Yes  ☐ No  Is this request for the course to satisfy the scholarly inquiry requirement? If yes, attach "Q" materials for review.

☐ Yes  ☐ No  Will this change impact any existing programs? If yes, attach "Changing Graduation Requirements" form for each program that is impacted.

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to the Catalog & Curriculum Manager.

1) Howell Blake 4/23/15

Date
Or

2) Date

3) Date

Date

Chair, Chair, Graduate Council Graduate Council Committee

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RGR-222-1114
Any change, addition or removal of any restriction, or change in credit hours or availability for a course requires this form, accompanied by any supporting documentation, be completed and approved as indicated below.

REQUEST IS FOR CHANGE IN COURSE:  C  V  E  S  3  0  2  1  Soil Mechanics Lab

TO BE INCLUDED IN 20___/20___ CATALOG
Course changes are effective beginning with the fall term in which they appear in the University Catalog.

IS REQUEST FOR A CHANGE IN THE NAME LISTED ABOVE?  ☐ Yes  ☐ No  If yes, requested name:

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?  ☐ Yes  ☐ No  If yes, current credits ________ requested credits ________

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?  ☐ Yes  ☐ No  If yes, please check all that apply:

☐ Add  ☐ Remove  ☐ Pre requisite  ☐ Corequisite

☐ Add  ☐ Remove  ☐ Pre requisite  ☐ Corequisite

☐ Add  ☐ Remove  ☐ Other Restrictions*

*Other restrictions may include changing the grade mode (PY, 3/S, A-I, ELO), deactivating a course already in the system, majors or cross-listed restricted from registration, or other restrictions.

CVE 3020 is currently listed as a corequisite, but many students wait to take the lab which is fine with the department. CVE 3020 should be listed as a prerequisite or a corequisite.

☐ Yes  ☐ No  Is this request for the course to be used to measure program-level student learning outcomes?

☐ Yes  ☐ No  Is this request for the course to be to satisfy the scholarly inquiry requirement? If yes, attach "Q" materials for review.

☐ Yes  ☐ No  Will this change impact any existing programs? If yes, attach "Changing Graduation Requirements" form for each program that is impacted.

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to the Catalog & Curriculum Manager.

1) [Signature]
   Date  9/15/15

2) [Signature]
   Date  4/15/15

3) [Signature]
   Date  4-20-15

4) [Signature]
   Date

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REQUEST TO CHANGE THE REQUIREMENTS FOR A COURSE

Any change, addition or removal of any restriction, or change in credit hours or availability for a course requires this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Engineering  DEPARTMENT: Civil

REQUEST IS FOR CHANGE IN COURSE: CVE 3033 Hydraulics Lab

Prefix Number

TO BE INCLUDED IN 20____/20____ CATALOG

Course changes are effective beginning with the fall term in which they appear in the University Catalog.

IS REQUEST FOR A CHANGE IN THE NAME LISTED ABOVE?  □ Yes  □ No  If yes, requested name __________________________

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?  □ Yes  □ No  If yes, current credits __________________ requested credits ______________

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?  □ Yes  □ No  If yes, please check all that apply:

□ Add  □ Remove  ■ Prerequisite  □ Corequisite

Prefix Number

□ Add  □ Remove  ■ Prerequisite  □ Corequisite

Prefix Number

□ Add  □ Remove  □ Other Restrictions*  □ Yes  □ No  If yes, please use box below:

*Other restrictions may include changing the grade mod (P/F, S/N, A-I, E/I), deactivating a course already in the system, majors or class levels restricted from registration, or other restrictions.

CVE 3030 is currently listed as a corequisite, but many students wait to take the lab which is fine with the department. CVE 3030 should be listed as a prerequisite or a corequisite.

□ Yes  □ No  Is this request for the course to be used to measure program-level student learning outcomes?

□ Yes  □ No  Is this request for the course to be to satisfy the scholarly inquiry requirement? If yes, attach "Q" materials for review.

□ Yes  □ No  Will this change impact any existing programs? If yes, attach "Changing Graduation Requirements" form for each program that is impacted.

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to the Catalog & Curriculum Manager.

1)  Orig. Date  2)  Department Chair Date  3)  Dean's Office Date

4)  Chair, Graduate Council Date  OR  Chair, Undergraduate Curriculum Committee Date

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R02-022-11H
REQUEST TO CHANGE THE REQUIREMENTS FOR A COURSE

Any change, addition or removal of any restriction, or change in credit hours or availability for a course requires this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Engineering

DEPARTMENT: Civil

REQUEST IS FOR CHANGE IN COURSE: C V E

Prefix 4 0 6 0

Number Transportation Engineering

Course Title

TO BE INCLUDED IN 2017/2018 CATALOG

Course changes are effective beginning with the fall term in which they appear in the University Catalog.

IS REQUEST FOR A CHANGE IN THE NAME LISTED ABOVE? ☐ Yes ☐ No If yes, requested name: __________________________

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE? ☐ Yes ☐ No If yes, current credits: _________ requested credits: _________

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE? ☐ Yes ☐ No If yes, please check all that apply:

☐ Add ☐ Remove ☐ Pre-requisite ☐ Corequisite

Prefix 3 0 2 0

Number and or

Prefix _________ Number _________ and or

☐ Add ☐ Remove ☐ Other Restrictions* ☐ Yes ☐ No If yes, please use box below:

*Other restrictions may include changing the grade mode (D, F, S/N), deactivating a course already in the system, majors or class levels restricted from registration, or other restrictions.

Requirement: Senior standing

☐ Yes ☐ No Is this request for the course to be used to measure program-level student learning outcomes?

☐ Yes ☐ No Is this request for the course to satisfy the scholarly inquiry requirement? If yes, attach "Q" materials for review.

☐ Yes ☐ No Will this change impact any existing programs? If yes, attach "Changing Graduation Requirements" form for each program that is impacted.

APPLICATIONS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to the Catalog & Curriculum Manager.

1) John Howell, Chair, Graduate Council

Date: 4/22/15

2) Al Smith, Department Head/Program Chair

Date: 4/12/15

OR

3) Dean & Associate Dean

Date: 4/23/15

Chair, Undergraduate Curriculum Committee

Date

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RGR-220-11H
The addition or removal of any graduation requirement in a major or minor requires that this form, accompanied by supporting documentation, be completed and approved as indicated below. Incomplete or incorrect forms will not be processed.

COLLEGE: Engineering

DEPARTMENT: Civil

DEGREE LEVEL: BS

PROGRAM TITLE: Civil Engineering

TO BE INITIATED WITH CATALOG YEAR 2016 / 2017

CHANGE REQUESTED FOR □ major program □ minor program 7043

Program changes are effective beginning with the fall term in which they appear in the University Catalog.

□ Yes □ No Will this change impact the program's assessment process? If yes, attach a description of how the assessment will be impacted and the new process.

DESCRIPTION OF REQUESTED CHANGES: Attach a more detailed description and any supporting documentation.

Current Catalog

Junior Year

Fall
CVE 3042 Water and Wastewater Systems for Land Development or CVE 3052 Municipal Water and Wastewater Systems....3

Spring
Science elective*....3

Proposed Catalog Description

Junior Year

Fall
Science elective*....3

Spring
Environmental Engineering Elective**....3

After approved science electives add:

** Environmental Engineering Electives include Water and Wastewater Systems for Land Development (CVE 3042) or Municipal Water and Wastewater Systems (CVE 3052)

We have changed the environmental course offering to the spring, it is not taught in the fall. Science electives are taught both semesters.

Approvals: On completion of appropriate department approvals, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee, for approval below and forward to the Catalog & Curriculum Manager.

Originator

Date

Chair, Graduate Council

Date

Department Head / Major Program Chair

Date

Chair, Undergraduate Curriculum Committee

Date

Department Head / Minor Program Chair

Date

Dean or Associate Dean

Date

REGISTRAR'S USE ONLY

CAPP / Degree Evaluation □ Yes □ No Update completed Date Initials

Catalog Management System □ Yes □ No Update completed Date Initials
COMMENTS:
1. Each row represents a semester; for example, the first row indicates the courses to be taken in the Fall semester of the freshman year.
2. The number within ( ) = number of credits assigned to the course.
3. Note: Arrows indicate pre-requisites and/or co-requisites. Solid lines (or solid arrows) indicate co-requisites and dotted lines indicate pre-requisites; Example: PHY 1001 is a co-requisite of PHY 2091, and MTH 1001 is a pre-requisite of MTH 1002.
4. Total Credits per semester are shown in Last Column and Total for B.S. in Civil Engineering is shown at the bottom of the same column.

A. Choose from CVE 4016 (Reinforced Concrete Structures), CVE 4019 (Timber Structures), or CVE 4013 (Steel Structures).
B. Choose from OCN 2407 (Meteorology), OCN 2502 (Environmental Geology), ENS 3101 (Atmospheric Environments) BIO 1010 OR 1020 (Biological Discovery), ENS 1001 (The Whole Earth Course) or OCN 1010 (Oceanography).
C. Must be a senior to take this course.
D. Choose from CVE 3042 (Water and Waste Water Systems for Land Development) or CVE 3052 (Municipal Water and Wastewater Systems).
E. Choose from one of the following: Civilization II, American History: Pre-Columbian to Civil War Era or American History: From Reconstruction to the Present, British & American Literature I or II, World Art History II.
Proposed Civil Engineering Fall 2015 Total Credits 131

Name _________________________  ID# _________________________

131

COMMENTS:

Solid lines are pre or corequisites, Dashed lines are prerequisites.

1. Each row represents a semester; for example, the first row indicates the courses to be taken in the Fall semester of the freshman year.

2. The number within ( ) = number of credits assigned to the course.

3. Note: Arrows indicate pre-requisites and/or co-requisites. Solid lines (or solid arrows) indicate co-requisites and dotted lines indicate pre-requisites; Example: PHY 1001 is a co-requisite of PHY 2091, and MTH 1002 is a pre-requisite of MTH 1001.

4. Total Credits per semester are shown in Last Column and Total for B.S. in Civil Engineering is shown at the bottom of the same column.

A Choose from CVE 4016 (Reinforced Concrete Structures), CVE 4019 (Timber Structures), or CVE 4013 (Steel Structures).

B Choose from OCN 2407 (Meteorology), OCN 2602 (Environmental Geology), ENS 3101 (Atmospheric Environments) BIO 1010 OR 1020 (Biological Discovery), ENS 1001 (The Whole Earth Course) or OCN 1010 (Oceanography).

C Must be a senior to take this course.

D Choose from CVE 3042 (Water and Waste Water Systems for Land Development) or CVE 3052 (Municipal Water and Wastewater Systems).

E Choose from one of the following: Civilization II, American History: Pre-Columbian to Civil War Era or American History: