Texas A&M University
Departmental Request for a Change in Course
Undergraduate  •  Graduate  •  Professional
Submit original form and attachments.

1. This request is submitted by the Department of Civil Engineering
2. Course prefix, number and complete title of course: OCEN 682 Coastal Sediment Processes

3. Change requested
   a. Prerequisite(s): From: Approval of instructor To: OCEN 671 or approval of instructor
   b. Withdrawal (reason): 
   c. Cross-list with:
      Cross-listed courses require the signature of both department heads.
   d. Change in course title and description. Enter complete current course title and current course description in item 4; enter proposed course title and proposed course description in item 5.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 6. Attach a course syllabus.

4. Complete current course title and current course description:

5. Complete proposed course title and proposed course description (not to exceed 50 words):

6. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCEN</td>
<td>682</td>
<td>COASTAL SEDIMENT PROCESSES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0 1 4 2 4 0 1 0 0 6</td>
<td>0 6 3 0 0 0 3 6 3 2</td>
<td>6</td>
</tr>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by: 

Head of Department Date

Chair, College Review Committee Date

Dean of College Date

Dean of College Date

Submitted to Coordinating Board by:

Associate Director, Curricular Services Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 10/08
Supporting statements for requested prerequisite changes:

OCEN 671: Listed prerequisite of OCEN 462 is a mistake; actual prerequisite is our undergraduate fluid mechanics course - CVEN 311.

OCEN 678: Listed prerequisite of CVEN 462 does not exist; actual prerequisite is our undergraduate fluid mechanics course - CVEN 311.

OCEN 682: Faculty feel material covered in OCEN 671 is required for proper understanding of material in this course. We want to make this information clear to the students, rather than simply requiring approval of instructor.

OCEN 683: Faculty feel material covered in OCEN 678 is required for proper understanding of material in this course. We want to make this information clear to the students, rather than simply requiring approval of instructor.
Course title and number: OCEN682 Coastal Sediment Processes
Term (e.g., Fall 200X): Spring 2008
Meeting times and location: TTh 2:20-3:35PM CE104

Course Description and Prerequisites
Sediment properties and size distribution; fluvial sediment transport equations; movement of material by the sea; review of pertinent wave theories; littoral drift; inlet stability; coastal protection structures; similarity in sediment transport; movable bed models; sediment tracing; Aeolian sand transport; case studies. Prerequisites: Approval of instructor.

Learning Outcomes or Course Objectives
The student will be able to: determine sediment mobility conditions; interpret grain size distributions; calculate averaged motions in the nearshore and surf zones; determine bed load for given flow conditions; calculate suspended load by various theories for given flow conditions; analytically determine likely beach configuration changes given nearshore wave conditions.

Instructor Information
Name: Dr. James M. Kaihatu
Telephone number: 979-862-3511
Email address: jkaihatu@civil.tamu.edu
Office hours: MW 10:00-12:00
Office location: CE/TTI Rm 808D

Textbook and/or Resource Material

Grading Policies
Homework: 20%
Midterm Exam: 35%
Final Project: 45%

Grading Scale:
85-100: A
70-84.99: B
60-69.99: C
50-59.99: D
Below 50: F

Homework will be assigned at the end of each chapter and must be handed in by the due date before the start of each class. Late homework will not be accepted unless you have a University excuse (http://student-rules.tamu.edu/rule7.htm) and then only with advance notice where possible (with the exception of emergencies).

A class project will be assigned near the mid-point of the semester. Central to the project will be a critical review of published literature concerning the topics covered in this class.
### Course Topics, Calendar of Activities, Major Assignment Dates

**Midterm:** March 3, 2008

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 14</td>
<td>Introduction to sediment transport properties, grain size distributions</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>Jan. 21</td>
<td>Review of linear wave theory</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>Jan. 28</td>
<td>Introduction to averaged motion, nearshore hydrodynamics, undertow, swash</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>Feb. 4</td>
<td>Cross-shore transport</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>Feb. 11</td>
<td>Longshore transport</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>Feb. 18</td>
<td>Wave and current boundary layers</td>
<td>Chapter 8</td>
</tr>
<tr>
<td>Feb. 25</td>
<td>Fluid-sediment interaction</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>Mar. 3</td>
<td>Bedload, <strong>Midterm</strong></td>
<td>Chapter 9</td>
</tr>
<tr>
<td>Mar. 10</td>
<td>Spring break – <strong>no class</strong></td>
<td>Chapter 9</td>
</tr>
<tr>
<td>Mar. 17</td>
<td>Bed load</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>Mar. 24</td>
<td>Suspended load, final projects assigned</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>Mar. 31</td>
<td>Suspended load</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>Apr. 7</td>
<td>Beach morphology</td>
<td>Chapter 11</td>
</tr>
<tr>
<td>Apr. 14</td>
<td>Bed forms</td>
<td>Handout</td>
</tr>
</tbody>
</table>

Apr. 21 – Presentation of final projects

### Other Pertinent Course Information

#### Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu)

#### Academic Integrity

*For additional information please visit: [http://www.tamu.edu/aggiehonor](http://www.tamu.edu/aggiehonor)*

*“An Aggie does not lie, cheat, or steal, or tolerate those who do.”*