Syllabus

Spring 2016

CE 310

Introduction to Environmental Engineering

**Instructor:** Dr. Jia Liu
**Class:** 2:00 – 2:50 pm, MWF
**Classroom:** EGRA 0208
**Phone:** 618-453-7006 (office)
**Email:** jialiu@siu.edu
**Office hours:** 9:00 am-12:00 pm, M, W or by appointment

**Lab:** Melissa Peterein
**Classroom:** EGRB 0051
**E-mail:** melpeterein@siu.edu
**Office:** TBD
**Office hours:** TBD

**Grader:** TBD
**E-mail:**
**Office:**
**Office hours:**

**Course Description:**
Basic engineering aspects of water, land and air pollution and control. Problems, sources and effects of pollution. Major state and federal regulations relating to environmental issues. Laboratory supply fee: $30. Prerequisite: CHEM 210, MATH 250, and concurrent enrollment in or completion of CE 102.

**Required Textbook:**

**Grading:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Mid terms (2)</td>
<td>15% (each)</td>
</tr>
<tr>
<td>Final</td>
<td>25%</td>
</tr>
<tr>
<td>Attendance</td>
<td>5%</td>
</tr>
<tr>
<td>Lab</td>
<td>25%</td>
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</tbody>
</table>
**Class Policy:**
Class participation and discussion will be solicited and are strongly encouraged. Regular attendance is required and will be counted in the final grades. Up to two times of missing classes without notice the instructor in advance is allowed. One point will be deducted from the third voluntary missing of class, half point will be taken if permission is granted in advance from the instructor, and no points will be taken for involuntary leave such as military service or other unforeseeable or uncontrollable reasons.

**Homework Policy:**
It is expected that each student will complete their own homework assignments including thinking about the solution approach, completing all calculations and preparing the write-up for submission. It is also recognized and appreciated that consulting with your peers can be a valuable learning experience when all parties concerned actively participate. However, the work you submit is expected to represent your independent effort. Homework will be due two weeks after each assignment and will be returned one week after your submission. Late homework will **NOT** be accepted.

**Exam Policy:**
Exams are to be completed independently. No communication with others is permitted. Computers, databases, devices with wireless communication and internet access capabilities are not permitted. The use of calculators is permitted.

If you miss taking an exam, you need to notify your instructor no later than 48 hours after the scheduled exam and take to your instructor a written explanation (eg: doctor's note) describing the event beyond your control that prevented you from taking the exam. For students with a legitimate, acceptable excuse, a make-up exam will be scheduled on an individual basis.
# Tentative Schedule

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 20-22</td>
<td>Introduction and chemistry</td>
<td>Chapter 1, 2</td>
</tr>
<tr>
<td>Jan 25-29</td>
<td>Biology</td>
<td>Chapter 2, 3</td>
</tr>
<tr>
<td>Feb 1-5</td>
<td>Material and mass balances</td>
<td>Chapter 3, 4</td>
</tr>
<tr>
<td>Feb 8-12</td>
<td>Ecosystems and risk assessment, Hydrology</td>
<td>Chapter 5-7</td>
</tr>
<tr>
<td>Feb 15-19</td>
<td>Sustainability, Review 1</td>
<td>Chapter 8</td>
</tr>
<tr>
<td>Feb 22-26</td>
<td><strong>Midterm I.</strong></td>
<td></td>
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<tr>
<td></td>
<td>Water quality management</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>Feb 29-Mar 4</td>
<td>Water quality management</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>Mar 7-11</td>
<td>Water treatment</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>Mar 14-18</td>
<td>Spring Break</td>
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<tr>
<td>Mar 21-25</td>
<td>Water treatment, Wastewater Treatment</td>
<td>Chapter 10, 11</td>
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<tr>
<td>Mar 28-Apr 1</td>
<td>Wastewater Treatment, Review 2</td>
<td>Chapter 11</td>
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<tr>
<td>Apr 4-8</td>
<td><strong>Midterm II.</strong></td>
<td>Chapter 12</td>
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<tr>
<td></td>
<td>Air pollution</td>
<td>Chapter 12</td>
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<tr>
<td>Apr 11-15</td>
<td>Air pollution</td>
<td>Chapter 12</td>
</tr>
<tr>
<td>Apr 18-22</td>
<td>Solid waste, Hazardous waste</td>
<td>Chapter 13, 14</td>
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<tr>
<td>Apr 25-29</td>
<td>Hazardous waste, Noise pollution</td>
<td>Chapter 14, 15</td>
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<tr>
<td>May 2-6</td>
<td>Ionizing radiation, Review 3</td>
<td>Chapter 16</td>
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<tr>
<td>May 9-13</td>
<td><strong>Final examination</strong></td>
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IMPORTANT DATES *

Semester Class Begins .................................................. 01/19/2016
Last day to add a class (without instructor permission) ............... 01/24/2016
Last day to withdraw completely and receive a 100% refund .......... 01/31/2016
Last day to drop a course using SalukiNet ............................................. 03/04/2016
Last day to file diploma application (for name to appear in Commencement program) ............................................. 02/12/2016

Final examinations ............................................................................. 05/09–05/13/2016

Note: For outreach, internet, and short course drop add dates, visit Registrar’s Academic webpage: http://registrar.siu.edu/

SPRING SEMESTER HOLIDAYS
Martin Luther King, Jr.’s Birthday Holiday 01/18/2016
Spring Break 03/12–03/20/2016

WITHDRAWAL POLICY ~ Undergraduate only

Students who officially register for a session may not withdraw merely by the stopping of attendance. An official withdrawal form needs to be initiated by the student and processed by the University. For the proper procedures to follow when dropping courses and when withdrawing from the University, please visit http://registrar.siu.edu/catalog/undergraduatedegreecatalog.html

INCOMPLETE POLICY ~ Undergraduate only

An INC is assigned when, for reasons beyond their control, students engaged in passing work are unable to complete all class assignments. An INC must be changed to a completed grade within one semester following the term in which the course was taken, or graduation, whichever occurs first. Should the student fail to complete the course within the time period designated, that is, by no later than the end of the semester following the term in which the course was taken, or graduation, whichever occurs first, the incomplete will be converted to a grade of F and the grade will be computed in the student's grade point average. For more information please visit: http://registrar.siu.edu/grades/incomplete.html

REPEAT POLICY

An undergraduate student may, for the purpose of raising a grade, enroll in a course for credit no more than two times (two total enrollments) unless otherwise noted in the course description. For students receiving a letter grade of A,B,C,D, or F, the course repetition must occur at Southern Illinois University Carbondale. Only the most recent (last) grade will be calculated in the overall GPA and count toward hours earned. See full policy at http://registrar.siu.edu/catalog/undergraduatedegreecatalog.html

GRADUATE POLICIES

Graduate policies often vary from Undergraduate policies. To view the applicable policies for graduate students, please visit http://gradschool.siu.edu/about-us/grad-catalog/index.html

DISABILITY POLICY

Disability Support Services provides the required academic and programmatic support services to students with permanent and temporary disabilities. DSS provides centralized coordination and referral services. To utilize DSS services, students must come to the DSS to open cases. The process involves interviews, reviews of student-supplied documentation, and completion of Disability Accommodation Agreements. http://disabilityservices.siu.edu/

PLAGIARISM

Student Conduct Code http://sr.siu.edu/student_conduct_code/

MORRIS LIBRARY HOURS
http://www.library.siu.edu/about

SAFETY AWARENESS FACTS AND EDUCATION

Title IX makes it clear that violence and harassment based on sex and gender is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here: http://safe.siu.edu

SALUKI CARES

The purpose of Saluki Cares is to develop, facilitate and coordinate a university-wide program of care and support for students in any type of distress—physical, emotional, financial, or personal. By working closely with faculty, staff, students and their families, SIU will continue to display a culture of care and demonstrate to our students and their families that they are an important part of the community. For information on Saluki Cares: (618) 453-5714, or siucares@siu.edu, http://salukicare.siu.edu/index.html

EMERGENCY PROCEDURES

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. We ask that you become familiar with the EMERGENCY RESPONSE PLAN and BUILDING EMERGENCY RESPONSE TEAM (BERT) programs. Emergency response information is available on posters in buildings on campus, available on BERT’s website at www.ber1.siu.edu. Department of Safety’s website at www.dps.siu.edu (disaster drop down) and the Emergency Response Guideline pamphlet. Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency.

INCLUSIVE EXCELLENCE

SIU contains people from all walks of life. From many different cultures and sub-cultures, and representing all strata of society, nationalities, ethnicities, lifestyles, and affiliations. Learning from and working with people who differ is an important part of education as well as an essential preparation for any career. For more information please visit: http://www.inclusiveexcellence.siu.edu/

LEARNING AND SUPPORT SERVICES

Help is within reach. Learning support services offers free tutoring on campus and math labs. To find more information please visit the Center for Learning and Support Services website:

Tutoring : http://tutoring.siu.edu/
Math Labs : http://math.siu.edu/courses/course-help.php

WRITING CENTER

The Writing Center offers free tutoring services to all SIU students and faculty. To find a Center or Schedule an appointment please visit http://write.siu.edu/

AFFIRMATIVE ACTION & EQUAL OPPORTUNITY

Our office’s main focus is to ensure that the university complies with federal and state equity policies and handles reporting and investigating of discrimination cases. For more information visit: http://diversity.siu.edu/

Additional Resources Available:

SALUKINET: https://salukinet.siu.edu/ep/home/displaylogin
ADVICE: http://advisement.siu.edu/
PROVOST & VICE CHANCELLOR: http://pvcaa.siu.edu/
SIU ONLINE: http://online.siu.edu/

Spring 2016 R O’Rourke