FAIRLEIGH DICKINSON UNIVERSITY- Metropolitan Campus  
School of Natural Sciences  

LECTURE OUTLINE  

Semester: Spring 2013  

INSTRUCTOR: Mr. J.A. Labriola, Adjunct Faculty  
Campus Mailbox Location: Dickinson Hall, Room DH4467  
S.O.N.S. General Phone No.: (201) 692-2391  
FDU Web Mail: jlabrio@fdu.edu  

COURSE TITLE: ENVIRONMENTAL RISK ASSESSMENT  
CATALOG NO.: ENVR 6552  CREDITS: 3  

TEXT MATERIALS:  

COURSE DESCRIPTION: This course describes the scientific basis for the steps in the risk assessment processes and discusses current guidelines and procedures for performing them.  

<table>
<thead>
<tr>
<th>LECTURE (Weeks/Date)</th>
<th>TOPIC</th>
<th>READING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/28</td>
<td>Introduction and Overview of Environmental Risk Assessment</td>
<td>Handouts</td>
</tr>
<tr>
<td>2 2/4</td>
<td>Principles of Toxicology</td>
<td>Handouts</td>
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<tr>
<td>3 2/11</td>
<td>Epidemiology and Cancer Risk Assessment</td>
<td>Handouts</td>
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<tr>
<td>4 2/18</td>
<td>Classes of Chemical Toxicants and Physical Agents</td>
<td>Handouts</td>
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<tr>
<td>5 2/25</td>
<td>Classes of Bioagents</td>
<td>Handouts</td>
</tr>
<tr>
<td>6 3/4</td>
<td>Contaminants and Hazards in Environmental Systems/Media</td>
<td>Handouts</td>
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<tr>
<td>3/11</td>
<td>NO CLASS-SPRING BREAK</td>
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<tr>
<td>7 3/18</td>
<td>EXAM #1 (MID-TERM)</td>
<td></td>
</tr>
<tr>
<td>8 3/25</td>
<td>U.S. Federal Risk Assessment Regulations and Guidance</td>
<td>EPA H (1,2)</td>
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</tbody>
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TERM PAPER #1 DUE
9 4/1  Human Health Evaluation Risk Assessment-I  EPA H (1-5)
10 4/8  Human Health Evaluation Risk Assessment-II  EPA H (6-7)
11 4/15 Human Health Evaluation Risk Assessment-III  EPA H (8-10)
12 4/22 Ecological Risk Assessment  EPA E
13 4/29 Risk Assessment and Management Case Studies  Handouts
14 5/6 Risk Perception, Communication, and Remediation  Handouts
    TERM PAPER #2 DUE
15 5/13 EXAM #2 (FINAL)

**NOTE:** This course will be taught in accordance with the above sequence, but is subject to change with the Instructor’s notice

**Evaluation:**

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<tbody>
<tr>
<td>A.</td>
<td>Unit Examinations</td>
<td>(2)</td>
<td>50%</td>
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<tr>
<td>B.</td>
<td>Term Papers</td>
<td>(2)</td>
<td>50%</td>
</tr>
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<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>100%</strong></td>
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</table>

**Attendance:** Students are expected to attend all scheduled classes

**NOTE:** The Instructor may modify this evaluation and attendance policy at the Instructor’s discretion with proper notification to the student.

**ADDITIONAL NOTES:**

1. All unit examinations must be taken and term papers submitted in order to receive a final grade. Make-up examinations will be administered in accordance with the Instructor’s and School of Natural Sciences/University College/FDU policies.
2. Students have the responsibility to maintain compliance with the University Academic Integrity Policy with reference to the current University Graduate and Undergraduate Studies Bulletins.
ADDENDUM: OUTCOMES ASSESSMENT

Course Objectives: The objectives (goals) of this course are for you to become competent in the knowledge of: 1) The fields of environmental health and environmental risk assessment  2) the variety of physical, chemical, and biological hazards of current environmental health concern 3) basic guidelines and procedures necessary to perform Human Health Risk Assessments and Ecological Risk Assessments 4) the various local, State, Federal, and International governmental agencies and programs related to environmental risk assessment  5) the operations and management of a public environmental health management office 6) scientific/technical, social, economic , legal, ethical, and political aspects of environmental risk management  7) actual individual environmental health problems/issues (“case-study approach) from the perspective of an environmental health professional/manager

Teaching Methodologies/Activities

The following will be used to assess student learning:

1. Exams and Term Papers to assess numbers 1-7 above

Modes of Instruction that will be used by the Instructor:

1. Oral Presentation
2. On-line Assignments and Discussion Sessions

ADDENDUM: BLENDED COURSE SCHEDULE

1. Weekly 75 minute lectures
2. Weekly 75 minute on-line sessions