SCIENCE & MATH PROGRAM, ENVIRONMENTAL SCIENCES MAJOR
ENVS 4004 GLOBAL CLIMATE CHANGE (WRITING INTENSIVE)
ACADEMIC YEAR 2018-2019
FALL 2018
COURSE SYLLABUS

1. COURSE INFORMATION
Classes held: Lectures - Monday, Wednesday; 9:30 – 10:50 AM
Credits: 4
Prerequisite: None; it is Environmental Sciences Major Elective and counted as DS Minor, WI, UG 2/3/4

2. FACULTY INFORMATION
Faculty Name: Mukesh Gupta, PhD; Assistant Professor of Environmental Sciences
Email: mukesh.gupta@auw.edu.bd
Office Location: H603
Office Hours: Monday and Wednesday, 2:00 – 3:00 PM; other times by appointment only
Qualifications: PhD in Environmental Sciences & Policy
Areas of Expertise: Climate Change & Energy for Development, Low Carbon Growth Analysis

3. TEXT AND OTHER COURSE MATERIALS
1. Global Climate Change by Arnold J. Bloom (2010), University of California Davis, USA

4. COURSE OBJECTIVES AND DESCRIPTION
Course overview:
Global Climate Change (GCC) is a course on climate and climatic changes to provide a thorough understanding of what causes changes in the earth’s climate but more importantly the solution sphere. Potential effects and major environmental concerns due to climate change in different regions, from Asia and elsewhere in the world, will be examined. This will also include ecological effects and human dimensions of climate change. At the same time, policies, politics, adaptation and mitigation options that could reduce the impact of climate change will be discussed. In essence, this course provides an introduction to climate change science, impacts and policy implications.
LEARNING OUTCOMES

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Method of Assessment</th>
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<tbody>
<tr>
<td>Students are expected to gain an understanding of the nature and processes of climate change. They will learn the methods used to examine the potential consequences of climate change. Students will be able to evaluate and analyse climate change research critically and reflect on the strengths and weaknesses and potential societal implications of the climate change science. At the same time, students will develop an understanding of the scientific evidence needed for policymakers and society to respond to the problems associated with global climate change.</td>
<td>Writing assignments, Quiz, case-based assignment, group work, and class performance assessment</td>
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5. ATTENDANCE REQUIREMENT & GRADING POLICY

**Attendance:** AUW expects 100% punctual class attendance. Attendances are mandatory. Attendance will be taken and unexcused absences will be subject to academic actions. For learning more details on AUW ‘Attendance Policy’ please consult Academic Bulletin 2017-18 ([http://asian-university.org/academic-programs/academic-calendar-bulletin/](http://asian-university.org/academic-programs/academic-calendar-bulletin/)).

**Grading:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Marks</th>
<th>Grading Scale</th>
<th>Grade</th>
<th>Grading Scale</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Quizzes/ in-class writings</td>
<td>15-20</td>
<td>100-96.68%</td>
<td>A+</td>
<td>73.33-76.67%</td>
<td>C</td>
</tr>
<tr>
<td>• Article summaries</td>
<td>15-20</td>
<td>96.67-93.33%</td>
<td>A</td>
<td>70.00-73.32%</td>
<td>C-</td>
</tr>
<tr>
<td>• Book/journal article</td>
<td>10</td>
<td>93.32-90%</td>
<td>A-</td>
<td>66.68-69.99%</td>
<td>D+</td>
</tr>
<tr>
<td>Critique, etc</td>
<td></td>
<td>86.68-89.99%</td>
<td>B+</td>
<td>63.33-66.67%</td>
<td>D</td>
</tr>
<tr>
<td>• Letter to policymakers</td>
<td>10</td>
<td>83.33-86.67%</td>
<td>B</td>
<td>60.00-63.32%</td>
<td>D-</td>
</tr>
<tr>
<td>• Review Paper</td>
<td>35-40</td>
<td>80.00-83.32%</td>
<td>B-</td>
<td>59.99% or below</td>
<td>F</td>
</tr>
<tr>
<td>• Attendance and Participation</td>
<td>10</td>
<td>76.68-79.99%</td>
<td>C+</td>
<td>below</td>
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</tr>
</tbody>
</table>

*Distributions of marks are approximations and subject to change based on academic activities performed*

6. INSTRUCTIONS ON WRITING ASSIGNMENTS

**Short, in-class Writings/ Writing Prompts/ quizzes:** A topic around which you start jotting down ideas. The prompt will be a single word, a short phrase, a topic discussed in the class or even a picture, with the idea being to give you something to focus upon as you write. Quizzes are unannounced and there are no makeovers for these.

**Article Summaries:** During some weeks, you will be asked to research and choose a scientific article relevant to the subject for the week, read it thoroughly, and write a one-page summary of the article. Your goal is to concisely convey what scientific question was addressed in the paper, why that question was of interest, how the study was conducted, what was found, and what the results mean. I will provide feedback on each summary that you should use to improve your writing on future summaries.

**Book Critique:** The idea behind this assignment is to give you the opportunity to read a detailed historical account on a particular subject and to analyze the book critically. The paper you will be writing should be a book critique, rather than a book report. In a book report, you simply summarize the book. In a book critique, you go much further - you analyze and evaluate the book.

**Letters to a Policymaker:** I may ask you to write letters to policymakers on recent CC issues. First, select a recent newspaper story on a climate change issue. Write a letter to a relevant policymaker of your country asking him/her to take necessary steps to address the issue. Cite literatures wherever necessary. In this letter, try to identify and describe a CC issue equipping with references and try to motivate the policymaker describing why it is important to take immediate steps on this CC-related issue.

**Review Paper:** Each student will be required to write a CC review paper on a topic of their choice. This will be the central writing assignment of the course. Students will improve skills related to performing a literature search, gleaning information from scientific papers, constructing an argument and supporting it with evidence, structuring a scientific paper, and evaluating their peers.

Students start the writing process identifying a central question relevant to CC. Next, students will consult 8-10 relevant peer-reviewed articles from the scientific literature. Student will then make a claim related to their study question. The purpose of the paper is then to make a persuasive argument (supported by evidence) for the claim chosen by the
student. The structure of the paper will follow that of a typical scientific literature review, including Title, Affiliation, Abstract, Introduction, Discussion, Conclusion, and References.

The paper will be 8-10 page long excluding the title page and reference page. For reference citation, follow ‘Climate Change’ journal style. Font- Times New Roman, Size- 12, Spacing- 1.5, Margins- 1 inch each side, Number pages. An MSWord electronic copy (≤ 1 mb) of the FIRST DRAFT is due on or before TBD via course moodle (email or hard copy submission will not be accepted). Paper submitted more than one week late will not be accepted. Plagiarized papers will receive a zero. After submission, I may ask you to present and discuss the paper in the class.

7. CONTACT WITH YOUR PROFESSOR

Preferred method of communication: face to face talk during office hours. Therefore, you are strongly encouraged to discuss any topic on this course during office hour declared by the course instructors or other time by appointment. However, if you are in critical need of communication after office hours you may email your instructor accepting some delay in response.

8. COURSE CONTENTS

- Introduction to Global Climate Change; Climate change science; Climate Forcing Factors; Impacts of Higher CO₂ Concentrations; GCC & Sea Level Rise; Global Climate Models & Predictions,
- Updates from COPs on CC; Economics, Legal Aspects of Global Climate Change, CC Mitigation Strategies; Emerging Pathways of Sustainable Transformation; Impacts, Adaptation, and Vulnerability; Climate and development nexus
- Low-emission development strategies; Economics of climate change; Growth within Planetary Boundaries; Resource Consumption; Science-Policy interface;
- Low carbon future and energy trends (scenario analysis); A social contract for sustainability; Sustainability in an urbanizing planet; Environmental Policy and Economics; Carbon pricing and carbon trading; Sociotechnical transition pathways; Emerging Pathways of Transformation; Evolutionary Economics perspective (lock-in effect); Co-benefits approach
- Business and the Environment; Stabilization Wedges; Energy for a Shared Development Agenda

Making-up exams: Students should not miss any exams or deadline for any assignments. However, you will be allowed to make-up a test (or assignment/report submission) within a week of the missed exam if your absence is designable as ‘Excused Absence’ according to AUW policy. Quizzes are unannounced and there are no makeovers for these.

9. PLAGIARISM & ACADEMIC INTEGRITY

All members of the AUW Community are bound by the Academic Honor Code published in the Academic Bulletin (http://www.auw.edu.bd/academics/course-bulletin/).

The integrity of students’ academic work is very important to AUW faculty. Universities are based upon the fundamental principle that the work presented truly belongs to the author, because the academic community revolves around ideas and creativity. Each person’s ideas are his or her contribution to the academic community. Therefore, taking another person’s ideas and representing them as one’s own is a serious form of dishonesty. Similarly, cheating (copying someone else’s work, asking for answers, sharing answers, etc.) and other forms of dishonesty (falsifying data, making up references, etc.) are also serious breaches of this honor code.

Plagiarism is intentionally or unintentionally taking credit for another’s words or ideas. You may not plagiarize in your academic work, and you must adhere to the following:

- When you use someone else’s words (whether they are from a distinguished author or a classmate’s paper), place the words you have copied in quotation marks and provide the appropriate citation of author and source. A good guideline to use to avoid plagiarism is to make sure quotes of three or more sequential words from someone else
are put into quotation marks.

- If you paraphrase (reword) another person’s ideas, then you must also cite the source. Paraphrasing must involve changing the words and sentence structure of the original source.
- Cite materials you copy or paraphrase from the Internet, even if the author is not identified.

The various academic disciplines (humanities, social sciences, sciences) use slightly different formats for footnotes, endnotes, and bibliographies. Your professor for a particular class will tell you which format he or she wants you to use in that class.

Copying, asking for answers, sharing answers, and any other form of cheating (misrepresenting your own work and knowledge) on exams or quizzes are all forms of academic dishonesty.

Other Forms of Academic Dishonesty

1. Making up references, quoting wrong sources, etc.
2. Falsifying data.
3. Misrepresenting your situation to be excused from academic work.
4. Submitting the same paper in more than one class.
5. Informing a student in a later class about questions on tests or quizzes.
6. Misrepresenting your academic work or qualifications in any way.

Full details about plagiarism, academic dishonesty and penalties are available in the Academic Honor Code in the Academic Bulletin.

For any academic writing, students are advised to check for plagiarism before submission using free online plagiarism checker (e.g. http://smallseotools.com/plagiarism-checker/).

Use of any electronic device is not allowed in the class (lectures, exams). Please switch off your cellphone while you are in the class. If your cellphone (or any other electronic device) is switched on during any exam it will be considered as academic dishonesty and will be punished as per university policy.

Please be on time. You will not get class attendance and not be allowed to attend quiz/class test if you are late.

Course moodle link: http://103.98.135.8/moodle/course/view.php?id=552