GENERAL INFORMATION

Instructor:
Dr. Xuewen Wang
Office:
CP216, MMC
Office Hours:
Virtual Office Hours, M & W 1:00-2:00pm, otherwise send me a message
Phone:
(305) 348-3064
Email:
Use Bb messages for course-related communication

Course Description And Purpose
The primary focus of this course is the advances in sciences and their application in technology in the last century, and how these advances have reshaped the lives of communities and radically altered their relationship with each other as well as with their environment. Specifically, how would the two science themes (renewable energy and information technology) and global dynamic systems such as economic development and socio-political/physical environment influence each other at the community level and national and international level.

Course Objectives
Students will be able to:
- identify and describe issues arising from the way scientific advances impact the quality of life in communities across the globe.
- critically analyze and evaluate interrelationships between advances in science and the quality of life in different communities across the globe.

This course is designed to explore how scientific advances change the lives of communities globally and teaches non-science majors basic concepts in energy and technology that they use in daily lives. Specifically, the course will focus on the production and consumption of renewable energies and
innovative electronics in communication and medicine, and discuss their impact on the global economy and the quality of life of communities across the globe.

**Science Simulation Experiments:** Students will be able to learn scientific concepts by engaging in online interactive simulation exercises.

**Thought Experiments:** Students will be engaged in the investigation of global issues for each thought experiment. At the first stage students will be able to provide individual reports as to the outcome of their thought experiment. At the second stage, teams of students will be ready to engage in group discussions to discuss the questions in chat rooms and produce a team report on the same issue.

**Global Engagement in Labs:** The students will be able to integrate the science simulation and thought experiments to come up with solutions and proposals as to how governmental and non-governmental organizations in their communities can use the advances in sciences more effectively.

**Global Learning Course Outcomes**
- **Global Awareness:** Students will be able to critically analyze the interrelationship between advances in science and quality of life in different communities around the globe.
- **Global Perspective:** Students will be able to articulate multiple perspectives on the interrelationship between advances in science and the quality of life experienced by different communities.
- **Global Engagement:** Students will demonstrate a willingness to address issues arising from the way scientific advances impact the quality of life in communities across the globe.

**IMPORTANT INFORMATION**

**Policies**
Please review the policies page as it contains essential information regarding guidelines relevant to all courses at FIU and additional information on the standards for acceptable netiquette important for online courses.

**Technical Requirements & Skills**
One of the greatest barriers to taking an online course is a lack of basic computer literacy. By computer literacy we mean being able to manage and organize computer files efficiently, and learning to use your computer’s operating system and software quickly and easily. Keep in mind that this is not a computer literacy course; but students enrolled in online courses are expected to have moderate proficiency using a computer. Please go to the "What's Required" webpage to find out more information on this subject.

Please visit our Technical Requirements webpage for additional information.

**Accessibility And Accommodation**
Please visit our ADA Compliance webpage for information about accessibility involving the tools used in this course.

Please visit Blackboard's Commitment Accessibility webpage for more information.

For additional assistance please contact FIU's Disability Resource Center.

**Course Prerequisites**
There are no prerequisites for this course.

**Academic Misconduct Statement**
Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly to demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the
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educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook. Academic Misconduct includes: Cheating – The unauthorized use of books, notes, aids, electronic sources; or assistance from another person with respect to examinations, course assignments, field service reports, class recitations; or the unauthorized possession of examination papers or course materials, whether originally authorized or not. Plagiarism – The use and appropriation of another’s work without any indication of the source and the representation of such work as the student’s own. Any student who fails to give credit for ideas, expressions or materials taken from another source, including internet sources, is responsible for plagiarism. Learn more about the academic integrity policies and procedures as well as student resources that can help you prepare for a successful semester.

Proctored Exam Policy

Please note that the information contained in this section applies only if your course requires a proctored exam.

Through a careful examination of this syllabus, it is the student’s responsibility to determine whether this online course requires proctored exams. Please visit our Student Proctored Exam Instructions webpage for important information concerning proctored exams, proctoring centers, and important forms.

Textbook

No textbook required

Expectations Of This Course

his is an online course, which means most (if not all) of the course work will be conducted online. Expectations for performance in an online course are the same for a traditional course. In fact, online courses require a degree of self-motivation, self-discipline, and technology skills which can make these courses more demanding for some students.

Students are expected to:

• Review the how to get started information located in the course content
• Introduce yourself to the class during the first week by posting a self introduction in the appropriate discussion forum
• Take the practice quiz to ensure that your computer is compatible with Blackboard
• Interact online with instructor/s and peers
• Review and follow the course calendar
• Log in to the course no later than Wednesday of each week for new module
• Respond to discussion boards, blogs and journal postings by the end of the week
• Respond to messages within two days
• Submit assignments by the corresponding deadline
• Promptly resolve technical issues with technical support and inform instructor if need any extension on the assignment

The instructor will:

• Log in to the course everyday of the weekdays and once on weekends no later than Sunday noon
• Respond to discussion boards, blogs and journal postings within 2 days
• Respond to messages within 2 days
• Grade assignments within 7 days of the assignment deadline

Weekly Learning Objective
Students will be able to:

20. Introduce yourself to the class; take the global awareness test  
21. Able to identify the physical quantities with their appropriate units; able to perform basic unit conversions;  
22. Identify constituent of atoms  
23. Classify different types of energies  
24. Recognize the scientific basis of solar energy  
25. Identify the basis of radioactivity  
26. Able to describe the main viewpoint of pro and con about nuclear energy  
27. Take the midterm  
28. Recognize social and economical impact of solar and nuclear energy  
29. SPRING BREAK  
30. Identify components of electronics  
31. Analyze impact of discoveries in electronics on quality of life  
32. Recognize basic aspect of information technology  
33. Recognize working principles behind some modern medical instruments  

Proctored Exam Policy  
There are no proctored or on-campus exams.

COURSE DETAIL  
Course Communication  
Communication in this course will take place via messages. The message feature is a private, internal Blackboard only communication system. Users must log on to the blackboard system to send/receive/read messages. There are no notifications in Blackboard to inform users when a new message has been received; therefore, it is recommended that students check their messages routinely to ensure up-to-date communication. This is the best method to communicate with your instructor privately.  

LiveChat: It will be used during the online office hours.  
Discussion Forums  
Keep in mind that your discussion forum postings will likely be seen by other members of the course. Care should be taken when determining what to post. Discussion forums will be used for introductions, class discussions and other postings of general interest that are directly related to the course. Using the Introduce Yourself forum in the Discussion Board page of the course, introduce yourself to the class. This post will earn you 2 extra credit points. Due by Sunday, January 29th at 11:59PM.  
Assessments  
In order to mitigate any issues with your computer and online assessments, it is very important that you take the "Practice Quiz" from each computer you will be using to take your graded quizzes and exams. It is your responsibility to make sure your computer meets the minimum hardware requirements.  

Assessments in this course are not compatible with mobile devices and should not be taken through a mobile phone or a tablet. If you need further assistance please contact FIU Online Support Services.  

Assessment Expectations:  
- Global Awareness Test Due January 29th 11:59 PM  
- Midterm: From February 27th at 12:00AM to March 3rd at 11:59PM  
- Final: From May 1st at 12:00AM to May 5th at 11:59PM
Do not copy without the express written consent of the instructor.

Please note that the following information only applies if your course requires the use of the Respondus LockDown Browser to take assessments.

- Review the [Respondus LockDown Browser Instructions](#) on how to install, access your assessments and view your grades.
- After installing the browser, please take the Practice Quiz to familiarize yourself with the testing environment and to ensure that you have downloaded the Respondus Lockdown Browser correctly.

Assignments
There will be 13 homework assignments accessible from the Assignment Dropbox page. They will be due on Sundays by 11:59PM, check the course calendar below for dates.

Please note that the following information only applies if your course requires the use of Turnitin to submit your assignments.

- Review the detailed [Turnitin Instructions](#) on how to submit your assignments and how to review the Grademark comments (feedback) from your professor.

Adobe Connect Pro Meeting
Adobe Connect is an online meeting room where you can interact with your professor and fellow students by sharing screens, sharing files, chatting, broadcasting live audio, and taking part in other interactive online activities. We will be utilizing this tool to conduct office hours.

Meetings will be available on the following dates: **By Appointment Only**

**Requirements for using Adobe Connect:**
- Disable any window pop-up blocker.
- [Adobe Flash Player](#) is required to successfully run your Adobe Connect meeting. You can [test your computer](#) to make sure your computer and network connections are properly configured to provide you with the best possible Adobe Connect meeting experience.
- Use of a combination [headset and microphone](#) with USB connection is recommended to ensure quality sound and reduce technical difficulties.

Reference [Adobe Connect (Tutorials & Help)](#) to learn about the tool, how to access your meeting rooms and recordings.

Grading

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Midterm</td>
<td>30%</td>
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<tr>
<td>Final Exam</td>
<td>40%</td>
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<tr>
<td>Homework</td>
<td>30%</td>
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<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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*There will be 2 extra points available if you write an introduction in the discussion board*
Exams
In order to mitigate any issues with your computer and online assessments, it is very important that you take the "Practice Quiz" from each computer you will be using to take your graded quizzes and exams. It is your responsibility to make sure your computer meets the minimum hardware requirements.

Assessments in this course are not compatible with mobile devices and should not be taken through a mobile phone or a tablet. If you need further assistance please contact FIU Online Support Services. The Respondus Lockdown Browser will be required to access all exams:

- Review the Respondus LockDown Browser Instructions on how to install, access your assessments and view your grades.
- After installing the browser, please take the Practice Quiz to familiarize yourself with the testing environment and to ensure that you have downloaded the Respondus Lockdown Browser correctly.

There will be an ungraded diagnostic exam, one Midterm Exam and one Final Exam. All exams will be held online. Exams will be due on Fridays by 11:55PM, check the course calendar below for dates.

COURSE CALENDAR
Module Weekly Schedule

<table>
<thead>
<tr>
<th>WEEK</th>
<th>CHAPTERS</th>
<th>HOMEWORK</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to globalization and what it means to be a global citizen,</td>
<td>• Take Global Awareness test: Available Monday, January 9th until Sunday, Januare 29th at 11:59PM.</td>
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<tr>
<td>January 9</td>
<td>what does it take to acquire global thinking. Download and install the</td>
<td>• Introduce yourself discussion: Due Sunday, January 29th at 11:59PM.</td>
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<td>- 15</td>
<td>Respondus Lockdown Browser (instructions available in the assessments</td>
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<td>Week 2</td>
<td>Scientific Notations and Units</td>
<td>• HW Mod #1 Essay: Due Sunday, January 22nd at 11:59PM.</td>
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<td>January 16</td>
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<td>• HW Mod #2 Essay: Due Sunday, January 22nd</td>
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<tr>
<td>WEEK</td>
<td>CHAPTERS</td>
<td>HOMEWORK</td>
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<td><strong>at 11:59PM.</strong></td>
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<td>• HW Mod #2 Quiz: Due <strong>Sunday, January 22nd at 11:59PM.</strong></td>
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<td>Week 3</td>
<td>Atoms. The Nature of Things</td>
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<td>January 23</td>
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<td>23 - 29</td>
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<td>Week 4</td>
<td>Introduction to energy</td>
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<td>January 30</td>
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<td>30 - February 5</td>
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<td>Week 5</td>
<td>Introduction and scientific basis of Solar Energy</td>
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<td>February 6</td>
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<td>6 - 12</td>
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<td>Week 6</td>
<td>The nucleus and Radioactivity</td>
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<td>February 13</td>
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<td>13 - 19</td>
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<td>Week 7</td>
<td>Introduction to nuclear energy and nuclear reactors</td>
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<td>February 20</td>
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<td>20 - 26</td>
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<tr>
<td>Week 8</td>
<td>MIDTERM Review the Midterm, form discussion groups for peer evaluations of the exam.</td>
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<tr>
<td>February 27</td>
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<tr>
<td>27 - March 5</td>
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<tr>
<td>Week 9</td>
<td>Social and economical aspects of solar and nuclear energy and its impact on quality of life around the world.</td>
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<td>March 6</td>
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<td>6 - 12</td>
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<td>Week 10</td>
<td>SPRING BREAK</td>
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<td>March 13</td>
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<td>13 - 19</td>
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<td>Week 11</td>
<td>Introduction to Electronics</td>
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<td>March 20</td>
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<td>• HW Mod #9 Quiz: Due <strong>Sunday, March 26th at 11:59PM.</strong></td>
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Week 12  
March 27 - April 2  
Social and economical aspects of the discoveries in electronics and its impact on quality of life around the world.  

- HW Mod #10 Quiz: Due Sunday, April 2nd at 11:59PM.

Week 13  
April 3 - 9  
Information Technology

- HW Mod #11 Essay: Due Sunday, April 9th at 11:59PM.

Week 14  
April 10 - 16  
Global Perspective of Globalization Part 1

- Global Perspective on Globalization Research
- HW Mod #12 Quiz: Due Sunday, April 16th at 11:59PM.

Week 15  
April 17 - 23  
Global Perspective of Globalization Part 2

- Global Perspective on Globalization Outline: Due Sunday, April 23rd at 11:59PM.

Week 16  
April 24 - 29  
Review and Further Discussion.

- Course review, evaluation, and suggestions.
- Lesson 14 Bonus Assignment: Due Sunday, April 30th at 11:59PM.
- Re-take the global awareness test: Due Sunday, April 30th at 11:59PM.

Week 17  
May 1 - 7  
FINAL EXAM

- Final Exam: Available Monday, May 1st at 12:00AM to Friday, May 5th at 11:59PM.
- HW Mod #13 Evaluations: Due Sunday, May 7th at 11:59PM.