COURSE DESCRIPTION
Nuclear energy has the potential to reduce our dependence on fossil fuels and reduce global warming over the long term. What are some of the problems that must be solved to make it feasible to expand nuclear power in the U.S. and elsewhere in the world? This course will familiarize you with the basic technology involved.

COURSE GOALS
• Improve critical thinking by developing evaluative, problem-solving, and expressive skills.
• Enhance group communication skills through discussions, small-group work, presentations or debates.
• Develop intellectual curiosity and better understand the role of a student in an academic community.
• Describe the operating principles of a boiling water nuclear reactor.
• Explain the obstacles posed by the need to dispose of radioactive waste
• Cite how psychologists account for the public’s fear of nuclear energy in contrast to wide public acceptance of other risks
• Cite health effects of radiation and the mechanism through which radiation can damage cells.

COURSE REQUIREMENTS
1. Class Attendance & Participation: Attendance and active participation in course discussions will be factors in determining your grade.

2. ITS Program Attendance Requirement: All students are expected to attend a Spring Commons Day event that focus on major and career exploration. More information will be available at http://ucolleges.stonybrook.edu/first-year-reading/commons-day-spring
• The ITS End of Year Ceremony (Date and Location TBD)
Additionally, students will need to attend:

• 1 ITS event designated as an educational program
• 1 ITS event designated as a social program

Students can only choose from among options offered on the ITS event website that specifically designate events as satisfying the requirements ([http://ucolleges.stonybrook.edu/its/events](http://ucolleges.stonybrook.edu/its/events))

** University Scholar students are strongly encouraged to attend ITS programs, but are not required. Scholars have their own event requirement, which includes at least one Scholars (for-credit) event and one ITS (for-credit) event per semester, or two Scholars (for-credit) events.**

3. **Required Reading:** Excerpts from various government documents will be distributed in class

4. **Assignments:** Students will discuss case studies in class and will be expected to make at least one class presentation on a nuclear technology or related issue.

5. **Spring Commons Day**- All students in a Freshman 102 Seminar are required to attend a Spring Commons Day Event on Wednesday, March 26, 2014. For more information about this day visit: [http://ucolleges.stonybrook.edu/spring-commons-day](http://ucolleges.stonybrook.edu/spring-commons-day)

6. **Computer use:** Students are expected to regularly check Blackboard and their e-mail account for information and correspondence with the instructor and Undergraduate Colleges.

**EVALUATION AND GRADING PROCEDURES**
Each Freshman 102 Seminar is a 1-credit course. Students may receive a grade between A-C or a U (Unsatisfactory).

**ACADEMIC INTEGRITY**
Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at [http://www.stonybrook.edu/uaa/academicjudiciary/](http://www.stonybrook.edu/uaa/academicjudiciary/)

**AMERICANS WITH DISABILITIES ACT**
If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, Room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

**CRITICAL INCIDENT MANAGEMENT**
Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.

**COURSE EVALUATIONS**
Each semester Stony Brook University asks students to provide feedback on their courses and instructors through an online course evaluation system. The course evaluation results are used by the individual faculty, department chairs and deans to help the faculty enhance their teaching skills and are used as part of the personnel decision for faculty promotion and tenure.

Stony Brook contracts with an outside vendor to administer the surveys and all results are completely anonymous. No individually identifiable data are ever reported back to the university or instructor. Students who have completed previous evaluations can view all faculty ratings at: [tl.t.stonybrook.edu/evaluate](http://tl.t.stonybrook.edu/evaluate)
# ITS 102: UNDERGRADUATE COLLEGE SEMINAR
## 7-WEEK SCHEDULE
### SPRING 2014

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>1/27</td>
<td><strong>Introduction to nuclear energy; basic nuclear physics</strong></td>
<td>Read handout</td>
</tr>
<tr>
<td>2/3</td>
<td><strong>Nuclear fuel cycle and nuclear fission</strong></td>
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<tr>
<td>2/10</td>
<td><strong>Reactor types I</strong></td>
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<td>2/17</td>
<td><strong>Reactor types II</strong></td>
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<td>2/24</td>
<td><strong>Radiation safety</strong></td>
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<tr>
<td>3/4</td>
<td><strong>Class presentation</strong></td>
<td>Prepare presentation, possible video</td>
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<tr>
<td>3/11</td>
<td><strong>Field trip to university radiation safety site</strong></td>
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