240403 - Debates on Technology and Society

Coordinating unit: 240 - ETSEIB - Barcelona School of Industrial Engineering
Teaching unit: 756 - THATC - Department of History and Theory of Architecture and Communication Techniques

Academic year: 2018
Degree: BACHELOR’S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2010). (Teaching unit Optional)
BACHELOR’S DEGREE IN INDUSTRIAL TECHNOLOGY ENGINEERING (Syllabus 2010). (Teaching unit Optional)
BACHELOR’S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Teaching unit Optional)

ECTS credits: 3

Teaching languages: English

Teaching staff
Coordinator: MARTA AGUILAR PEREZ

Prior skills
Students taking the course should at least have an Upper-Intermediate level (B.2.2) or above.

Degree competences to which the subject contributes

Transversal:
1. EFFICIENT ORAL AND WRITTEN COMMUNICATION. Communicating verbally and in writing about learning outcomes, thought-building and decision-making. Taking part in debates about issues related to the own field of specialization.
2. SUSTAINABILITY AND SOCIAL COMMITMENT. Being aware of and understanding the complexity of social and economic phenomena that characterize the welfare society. Having the ability to relate welfare to globalization and sustainability. Being able to make a balanced use of techniques, technology, the economy and sustainability.
3. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.
7. EFFECTIVE USE OF INFORMATION RESOURCES. Managing the acquisition, structure, analysis and display of information from the own field of specialization. Taking a critical stance with regard to the results obtained.
4. EFFICIENT ORAL AND WRITTEN COMMUNICATION. Communicating verbally and in writing about learning outcomes, thought-building and decision-making. Taking part in debates about issues related to the own field of specialization.
6. TEAMWORK. Being able to work as a team player, either as a member or as a leader. Contributing to projects pragmatically and responsibly, by reaching commitments in accordance to the resources that are available.
5. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

Teaching methodology
The course draws on the following methodologies:
- Explanatory lectures that allow for participation
- Case Study: After Reading texts, different connotations and interpretations of technology will be analyzed, evaluated and debated. Technology and its interrelationship with culture, society and western technological development will be analyzed (idea of progress linked to technological progress).
- Role-play in five or six debates.

Learning objectives of the subject
240403 - Debates on Technology and Society

- Describe, analyze and debate on technology, not as a neutral force but as a powerful human activity enmeshed in humans affairs.
- Develop critical thinking skills among students by means of the analysis and argumentation of Anglosaxon philosophers, historians, writers, etc.
- Identify and become aware of the English argumentative rhetoric and discourse and apply this discourse in order to participate in debates and discussions: express, exchange, defend or refute opinions in a convincing and appropriate way in English. Compare singularities and cultural differences.

| Study load |
|-----------------|-----------------|-----------------|
| **Total learning time**: 75h | Hours large group: | 0h | 0.00% |
| | Hours medium group: | 30h | 40.00% |
| | Hours small group: | 0h | 0.00% |
| | Guided activities: | 0h | 0.00% |
| | Self study: | 45h | 60.00% |
### Content

<table>
<thead>
<tr>
<th>Topic</th>
<th>Learning time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On the meaning of technology. Utopic and distopic views / Development in weaponry and the nuclear path.</strong></td>
<td>30h</td>
<td>Introduction to Technological Studies. The Manhattan Project: scientists' dilemma to drop the bomb, Oppenheimer and Cold War, our nuclear age. A Worksheet used as a guide to write an essay: summarise and assess selected sources. Links to website technologyandculture.com, and selected readings posted on Atenea and in book.</td>
</tr>
<tr>
<td><strong>Topic title Whose nature?: environmentalism views. The case of the car industry and the energetic debate.</strong></td>
<td>30h</td>
<td>Food technology. Text on Monsanto: writing an argumentative essay to summarise and assess selected readings. Debate on the reading. Links to website technologyandculture.com, and selected readings posted on Atenea and in book.</td>
</tr>
<tr>
<td><strong>Argumentative-persuasive discourse in English: Defend points of view and opinions, express different degrees of agreement and disagreement, express opinion and emotion in English.</strong></td>
<td>15h</td>
<td>Defend- refute opinions and put forward different degrees of (dis)agreement in a convincing way, studying related vocabulary and expressions (idioms, phraseology, neutral words vs. connotations and nuances). Linguistic tasks to identify and awareness-raising: paraphrasing (synonyms), fill-in, etc. Cultural differences between the English argumentative discourse and the Spanish-Catalan argumentative discourse. This will be practiced in debates.</td>
</tr>
<tr>
<td><strong>4. Information Technologies and society</strong></td>
<td>1h</td>
<td>Brief overview of the development of information technologies, their impact on and relationship with: a) society (mass media, company-related, state/military-related), and b) individual citizen (communication, human relationships, etc.).</td>
</tr>
</tbody>
</table>

**Learning time: 30h**
- Theory classes: 9h
- Practical classes: 6h
- Self study: 15h

**Learning time: 30h**
- Theory classes: 9h
- Practical classes: 6h
- Self study: 15h

**Learning time: 15h**
- Theory classes: 2h
- Practical classes: 3h
- Self study: 10h
240403 - Debates on Technology and Society

Planning of activities

| Description: | Students will have to deliver to orally summarize some of the lectures or videos they have chosen to read-see. They will act as springboards for discussion and debates. | Hours: | 15h  
Self study: 15h |

**ORAL PRESENTATION**  
**Hours:** 10h  
Self study: 10h

| Description: | The students will choose the topic and readings or videos assigned for that topic and will then write a written essay, following the guidelines in the worksheet (students will have to summarize and comment on the ideas present in the texts-videos). |

Qualification system

- Written Essay (Worksheet): 20%  
- Final Exam: 30%  
- Participation in class and debates and tasks, writing of argumentative pieces (on scholarly texts, interviews and videos): 50%

Bibliography

**Basic:**


**Others resources:**

Website: technologyandculture.com  
Materials posted on Atenea.