COURSE DESCRIPTION AND SYLLABUS

Science and Technology in the German-speaking Countries

Terms: Autumn and Spring
Duration: 21 hours (11 lectures, 10 seminars)
Credits value: 3 ECTS

Course Description

The aim of this module is to provide an overview of science and technology in the German-speaking countries. This module will introduce students to German scientific discoveries that have had a major impact in the fields of chemistry, physics and biology particularly from the 19th century to the present day alongside the main technical and industrial developments that have occurred in Germany, Austria or Switzerland since the middle of the 19th century. The development of technical education and of the main research institutions in German speaking countries will also be discussed.

By the end of the course students will have acquired a clear understanding and knowledge of the various events, processes and ideas that have governed the scientific research and culture in Germany, Austria and Switzerland and have led to its present technological and industrial developments. The language medium will be German and students will be trained in the vocabulary and idiom appropriate to the discussion of scientific and technical topics. In term 2, guest speakers will be invited from research and industry.

The course will require one 1-hour lecture/ seminar per week, plus 1-hour private study.

Students will be provided with a variety of up-to-date written and audio-visual documentation in German. In addition, they will be provided with a list of recommended reading material.

Assessment

Based on:

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<tr>
<th>Activity</th>
<th>Percentage</th>
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<tr>
<td>In-class writing task</td>
<td>25%</td>
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<tr>
<td>Oral presentation</td>
<td>25%</td>
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<tr>
<td>Written examination</td>
<td>50%</td>
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- 1 in-class writing task in the autumn term.
- 1 oral presentation at the beginning of the spring term.
- A two hour written exam at the end of the spring term.
Syllabus

Term 1
- Science before the 19th century
- Establishment of scientific institutions
- Universities, researchers and scholars
- Developments up to the 2nd world war
- Responsibilities of scientists

Term 2
- Scientific institutions, education and funding
- Science in Germany after unification
- What is Biology/Chemistry? Examples: Long-term experiments and other scientific topics of students’ choice
- Humanization of technology through technical progress
- Opening science to the public

Bibliography


Recommended Reading


Duden, Was jeder wissen muss. Verlag Bibliographisches Institut, Mannheim, SBN 3411711132

