Course Description

This course will look at the transformation that took place in German science from its relatively unimportant position in Western science in the late eighteenth century to its dominance of European science between the last quarter of the nineteenth century and the 1930s. We will look at the influence of the Romantic movement on science in Germany, the transformation of the university to a research institution, the emergence of seminars and instructional laboratories, the character of individual sciences in Germany, and the effect of national socialism on German science. All required course readings will be in English.

Course Mechanics

Class meetings will primarily be devoted to discussion with the occasional short lecture. Reading assignments will consist of articles and portions of books.

Leading Discussion: After the second week of class, class discussion of assigned readings will be led by groups of 2-3 students. As part of leading discussion, you will need to turn in a summary of the day’s reading (to me) and set of thoughtful discussion questions (to the class) the class period before your scheduled discussion meets. If you are not leading discussion, you will still need to turn in 2-3 discussion questions as part of your general participation and attendance grade. A sign-up sheet for leading discussions will be available during the second week of class. Your grade for leading discussion will also be determined in part by fellow students in the course.

Short Papers: For three class periods, there will be several articles assigned to read, but divided among the class. Each of you will choose one of these papers to read carefully (and skim the others), and turn in a one-page written summary. Each group of students who read the same paper will meet in class to organize and present a summary to the rest of the class for discussion and comparison to previous readings.

Research Paper: you will be expected to complete a major research paper (at least 20 pages) on the topic of your choice. This paper should consist of an analysis of a particular topic or issue related to German science that incorporates and addresses themes and issues addressed in class. You must also include primary sources in German or in translation. Early in the semester, you will submit a prospectus of your topic with a short written analysis of a primary or secondary source related to your research topic. This paper will serve as the starting point for your full paper. Later in the semester, you will turn in a working draft of your paper for grading. More details will be forthcoming.

Discussion of Research projects: The last three weeks of the semester will be devoted to your research project and completing the final draft of your paper. During class time, we will take time to discuss each specific project to make suggestions and improvements. Each student will need to present to the class a written summary of your project for evaluation and commentary. More information will be forthcoming.
**Attendance/Participation:** Attendance and participation is essential for a seminar class. I will note your attendance by your submission of discussion questions in class. Missing more than five class periods (of the 27 scheduled) will result in a lowering of your grade.

**Note:** Late work will not be accepted, except without *prior* arrangement. Computer problems will *not* be accepted as a reason for late work—plan ahead and always back up your work. Failure to submit an assignment will result in a grade of zero.

**Grading**

Your total grade for the course will be distributed as follows:
- Short papers: 30%
- Research Paper: 30%
- Leading Discussion: 20%
- Attendance/participation: 20%

**Required Texts**


A packet of readings available at the campus bookstore.

**Academic Honesty**

I expect that all your work in the class will be your own. Any violations of the principle of academic honesty will be treated in accordance with the policies outlined in Truman’s General Catalog for 2005-7.
Tentative Schedule

Topics and readings listed here are general and subject to change. Reading assignments for each day will be given on separate handouts.

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<tr>
<th>Date</th>
<th>Subject</th>
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<tr>
<td>January 9, 11</td>
<td>Introduction</td>
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<td></td>
<td>Romanticism</td>
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<td>January 16, 18</td>
<td>Romanticism, <em>con.</em></td>
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<td>January 30, February 1</td>
<td>Library research class (meet in Pickler 103)</td>
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<td>Universities</td>
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<tr>
<td>February 6, 8</td>
<td>Universities, <em>con.</em></td>
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<tr>
<td>February 13, 15</td>
<td>The Teaching and Research Laboratory</td>
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<td>February 20, 22</td>
<td>The Teaching and Research Laboratory, <em>con.</em></td>
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<td>Science Popularization</td>
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<tr>
<td>February 27, March 1</td>
<td>Science Popularization</td>
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<td>March 6, 8</td>
<td><em>Spring Break, no class</em></td>
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<td>March 13, 15</td>
<td>Disciplines and Institutes, 1870-1933</td>
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<td>March 20, 22</td>
<td>Disciplines and Institutes, 1870-1933</td>
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<td>Science under National Socialism</td>
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<td>March 27, 29</td>
<td><em>No class</em></td>
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<td>Science under National Socialism</td>
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<td>April 3, 5</td>
<td><em>Student Research Conference, no class</em></td>
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<td>Science under National Socialism</td>
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<td>April 10, 12</td>
<td>Science under National Socialism <em>Discussion of Projects</em></td>
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<td>April 17, 19</td>
<td><em>Discussion of Projects</em></td>
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<td>April 24, 26</td>
<td><em>Discussion of Projects</em></td>
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<td>April 30</td>
<td><em>Final Papers due 12 noon</em></td>
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Assigned Readings

Unless stated otherwise, all readings are available in books for purchase or in the course reading packet. Copies of articles are also on reserve in the library.

Romanticism

Thursday, January 11, 2007 Early Romanticism
Richards, Prologue (all), Chapter 1 (all), and Chapter 2 (pp. 17-36, 59-60, 94-105, skim the rest)

Tuesday, January 16, 2007 Schelling and Naturphilosophie
Richards, Chapter 3, pp. 114-146, 151-166, 176-192, skim the rest), Chapter 4 (all)

Thursday, January 18, 2007 Romantic biology
Richards, Chapter 6 (skim), Chapters 7, 8 and 9.

Tuesday, January 23, 2007 Goethe and morphology
Richards, Chapter 10 (pp. 364-376, skim the rest for biographical information), Chapter 11 (all)

Thursday, January 25, 2007 Romanticism in the physical sciences (choose one)

Tuesday, January 30, 2007 Library research techniques
Meet at Pickler Library, room 103

The German University

Thursday, February 1, 2007 Romanticism and the University
Tuesday, February 6, 2007 The university in nineteenth century Germany.

Thursday, February 8, 2007 The “Research Imperative”

The Teaching-Research Laboratory and Professionalization

Tuesday, February 13, 2007 The Chemical Teaching/Research Laboratory

Thursday, February 15, 2007 Professionalisation in Chemistry

Tuesday, February 20, 2007 Physics Pedagogy in Physics

Science Popularization

Thursday, February 22, 2007 Emil Roßmäßler and early popularization

Tuesday, February 27, 2007 Darwinism in Germany I

Thursday, March 1, 2007 Darwinism in Germany II
Disciplines and Institutes, 1871-1933

**Tuesday, March 13, 2007**

**Thursday, March 15, 2007**

**Tuesday, March 20, 2007**
Weimar science: physics and genetics (*choose one*)

Science under National Socialism

**Thursday, March 22, 2007** Science under National Socialism
Walker, chapters 1-4.

**Tuesday, March 27, 2007** *No class, work on papers*

**Thursday, March 29, 2007** Science under National Socialism (con.)
Walker, chapters 5-8.

**Tuesday, April 3, 2007** *Student Research Conference, no class*

**Thursday, April 5, 2007** Science under National Socialism (con.)
Walker, chapters 9-11.

**Tuesday, April 10, 2007** Biology and Chemistry under National Socialism (*choose one*)

**Thursday, April 12, 2007** *Discussion of projects begins*