## ENGRG/ECE/HIST 2500, STS 2501

## Technology in Society (Fall 2009)

MWF 10:10-11:00 Professor Ronald Kline 219 Phillips Hall 394 Rhodes Hall

rrk1@cornell.edu.

Office Hours: M: 1:30-3:00 Rock 334

W: 2:00-3:30 RH 394

## Required Texts

Robert Friedel, <u>A Culture of Improvement: Technology and the Western Millennium</u>. MIT Press, 2007.

Friedrich Engels, <u>The Condition of the Working Class in England in 1844</u> (1845).

Frederick W. Taylor, The Principles of Scientific Management (1911).

Willa Cather, Alexander's Bridge (1912).

Harold Loeb, Life in a Technocracy: What It Might Be Like (1933).

Philip K. Dick, Do Androids Dream of Electric Sheep? (1968).

Course Work (Percentage of Grade)

Four essays (20% each).

Weekly reading responses and participation in discussion section (20%).

## Course Schedule

(There is a Discussion Section in 219 Phillips every Friday, unless otherwise noted.)

<u>Friday</u> Aug. 28 Introduction

Reading: Friedel, chap. 1.

<u>Week 1</u>	Aug. 31-Sep. 4	Movement of Technology from China to Europe; Engineering in the Renaissance
		Reading: Friedel, chaps. 5-8.
Week 2	Sep. 7-11	What Was the "Industrial Revolution"
		Reading: Friedel, chap. 9; Engels, "Introduction," chaps. 1-4.
Week 3	Sep. 14-18	Textile Industry; Coal, Iron, & Steam
		Reading: Friedel, chaps. 11-12; Engels, chaps. 6-7, 9.
Week 4	Sep. 21-25	Communication and Transportation; Criticizing the Industrial Revolution
		<pre>Reading: Friedel, chap. 10; Engels, chaps. 5, 8, 11.</pre>
Essay 1	Handout (discuss	post on blackboard) 9/16, due 9/30
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Week 5	Sep. 28-Oct. 2	Geographical Expansion of British Industrialization
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	Sep. 28-Oct. 2	Geographical Expansion of British Industrialization Reading: Friedel, chaps. 13-14.
	Sep. 28-Oct. 2	Geographical Expansion of British Industrialization  Reading: Friedel, chaps. 13-14.  Technology and Colonialism
Week 6	Sep. 28-Oct. 2  Oct. 5-9  Fall Break	Geographical Expansion of British Industrialization  Reading: Friedel, chaps. 13-14.  Technology and Colonialism

Essay 2 Handout (discuss post on blackboard) 10/14, due 10/26

Oct. 19-23 <u>Week 8</u> Urbanization; Machine Age Inventors Reading: Friedel, chaps. 18-21, Taylor, all. Week 9 Oct. 26-30 The Rise of Mass Consumption Reading: Friedel, chaps. 22-23, Loeb, chaps. 1-2. Week 10 Nov. 2-6 Government and Technology in the Great Depression. Reading: Loeb, rest of book. Essay 3 Handout 11/6, due, 11/20. <u>Week 11</u> Nov. 9-13 Industrial Research; Technology in World War II Reading: Friedel, chap. 24; Dick, chaps. 1-6. Nov. 16-20 Postwar Consumerism <u>Week 12</u> Reading: Dick, chaps. 7-13. Nov. 23 <u>Monday</u> Counter-Narratives: Environmentalism Reading: Dick, chaps. 14-16. Nov. 25-29 Thanksgiving Recess <u>Week 13</u> Nov. 30-Dec. 4 Information Technology and Globalization Reading: Friedel, chaps. 25-26; Dick,

chaps. 17-22.

Essay 4 Handout 12/4, due on the date of the final exam.