



# HANYANG UNIVERSITY

## Hanyang International Summer School

<b>Faculty Information</b>	<b>Name</b>					
	<b>E-mail</b>					
	<b>Home University</b>					
	<b>Department</b>					
	<b>Homepage</b>					
<b>Course Information</b>	<b>Class No.</b>	TBA	<b>Course Code</b>	TBA	<b>Credits</b>	3
	<b>Course Name</b>	Revolutions in Science and Technology				
	<b>Lecture Schedule</b>	Online				
	<b>Course Description</b>	<p>This course explores the great revolutions in the history of science and technology in the 19th and 20th centuries: Darwin's theory of evolution, Einstein's theory of relativity, the atomic bomb, and the discovery of DNA. The course examines the cultural and social impacts, as well as the scientific and technological significance, of these events. Moral and ethical aspects of science and technology will be discussed, along with gender-related questions.</p> <p>The course covers a single scientific and technological revolution over the span of 2-3 weeks. In the first week, the focus is on the "origin" of the scientific and technological revolution, delving into the intellectual background and evolution of revolution. The second week concentrates on the reception of the scientific and technological revolution, examining how the scientific community and intellectual society embraced this revolution. In the third week, the focus shifts to the socio-cultural impacts brought about by this revolution. In the 14th week, ethical issues are addressed, particularly ethical problems arising from societal and economic impacts of atomic bombs and DNA. In the 15th week, we will take time to examine the current and future prospects and impacts of the scientific and technological revolution, reflecting on the history of revolutions in science and technology.</p>				
	<b>Course Objective</b>	<p>This course aims to examine the scientific and technological revolutions of the 19th and 20th centuries, which changed history, in order to understand the intellectual and social conditions under which these revolutions occurred, as well as how they were socially accepted and transformed society. The specific objectives are as follows:</p> <p>1. To understand the unfolding of historical events such as the Darwinian Revolution, the Einsteinian Revolution, the Atomic Bomb Revolution, and the DNA Revolution.</p>				



		<p>2. To comprehend the intellectual and social conditions under which scientific and technological revolutions occur.</p> <p>3. To understand the various ways in which scientific and technological revolutions are accepted in different social conditions.</p> <p>4. To envision the socio-cultural impact of past, present, and future scientific and technological revolutions based on an understanding of revolutions in the history of science and technology.</p>			
	<b>Prerequisite</b>	-			
	<b>Materials/Textbooks</b>				
<b>Evaluation</b>	<b>Attendance</b>	10%	<b>Quiz</b>	30%	
	<b>Assignment</b>	%	<b>Mid-term Exam</b>	30%	
	<b>Presentation</b>	%	<b>Final Exam</b>	30%	
	<b>Group Project</b>	%	<b>Participation</b>	%	
	<b>Etc.</b>	<b>Evaluation Item</b>		<b>Ratio</b>	
				%	
			%		
<b>Daily Lecture Plan</b>	<b>Week 1</b>	Day 1	Darwinian Revolutions – The Origins of the Origin		
		Day 2	Darwinian Revolutions – Reception of the Origin		
		Day 3	Darwinian Revolutions – Debates on Evolutionism vs. Creationism		
		Day 4	Einstein Revolutions – The Origin of Relativity		
	<b>Week 2</b>	Day 1	Einstein Revolutions – Reception of Relativity		
		Day 2	Einstein Revolution – The Assassin of Relativity		
		Day 3	Mid-term Exam		
		Day 4	Atomic Bomb Revolutions – The Manhattan Project and the Nazi Bomb Project		
	<b>Week 3</b>	Day 1	Atomic Bomb Revolutions – Who can control atomic bomb?		
		Day 2	Atomic Bomb Revolutions – Big Science and Big Politics		
		Day 3	DNA Revolution – The Origin of Double Helix		
		Day 4	DNA Revolution – Dawn of Bio-engineering		
	<b>Week 4</b>	Day 1	Ethical Issues in Revolutions		
		Day 2	Outlook on the Future Revolution		
		Day 3	Final Exam		
		Day 4	Graduation		