"History of Thought and Science" Course Information

Course Name	Code	Semester	Theory (hrs/week)	Application	Laboratory (hs/week)	National Credit	ECTS
History of Thought and Science	TET ~~704~~ 732	1. semester	~~3~~ 2	0	0	~~3~~ 2	~~5~~ 6
Perquisites	None						
Course language	Turkish						
Course type	Elective						
Mode of Delivery	Face to face						
Learning and teaching strategies	Lecture, Discussion, Question and Answer, Preparing and Presenting Reports						
Instructor (s)	Prof. Dr. Ramazan Acun, Prof. Dr. Nüket Örnek Büken, Assist. Prof. Dr. Önder İlgili, Lecturer Dr. Müge Demir.						
Course objective	To teach history of science in relation with history of thought						
Learning outcomes	1. Describe concepts science and history of science, in relation with philosophy, politics, art, economics and technology 2. Summarize scientific development from ancient to current times, analyse factors affecting development of scientific thought in historical perspective 3. Assess place and importance of history of medicine in history of science 4. Evaluate scientific theories, inventions and scientists (milestones in history) in their historical context. 5. Realize positive correlation with scientific/technologic development and social economics development						
Course Content	Roots of science in primitive communities and main developments leading modern science comparatively addressing history of thought.						
References	1. Ronan CA. "Bilim Tarihi" Tübitak Yayınları, Ankara 2005. 2. Asimov İ. "Bilim ve Buluşlar tarihi" İmge Kitapevi 2006. 3. Yıldırım C. "Bilim Felsefesi" Remzi Kitapevi İstanbul 2008. 4. Yıldırım C. "Bilim tarihi" Remzi Kitapevi İstanbul 2006. 5. Timuçin A. "Düşünce Tarihi" Bulut yayıncılık, 2008. 6. Tanilli S. "Uygarlık Tarihi", Alkım Yayınevi İstanbul 2006. 7. Şenel A. "Siyasal Düşünceler Tarihi". Bilim ve Sanat Yayınları 2011 8. Bernal JD Tarihte Bilim I (çev. Tonguç Ok). İstanbul: Evrensel Basım, 2008. 9. Bernal JD Tarihte Bilim II (çev. Tonguç Ok).. İstanbul: Evrensel Basım, 2008						

Course Outline Weekly

Weeks	Topics
1.	The birth of science in the context of empirical, philosophical, scientific information and character of science, relationship between history of science and thought
2.	Thought and science in ancient times
3.	Thought and science in middle ages
4.	Thought and science in rennaisance
5.	Scientific revolution: the birth of modern science and its character
6.	Revolution of science and industry
7.	Thought and science in nineteenth century
8.	Thought and science in twentieth century
9.	Effect of history and philosophy of science to current science
10.	Effect of socioeconomics, political, philosophical and religious thoughts to science
11.	Science in education, institutionalization of science and universities
12.	History of main scientific inventions and scientists
13.	Science policies
14.	Place of history of medicine in history of science and thought
15.	General preparation
16.	Final exam

Assessment methods

Course Activities	Number	Percentage
Attendance	14	20
Laboratory	-	-
Application	-	-
Field activities	-	-
Specific practical training	-	-
Assignments	1	20
Presentation	~~1~~	~~10~~
Project	1	30
Seminar	-	-
Midterms	-	-
Final exam	1	~~60~~ 30
Total		100
Percentage of semester activities contributing grade success		**40**
Percentage of final exam contributing grade success		**60**
Total		100

Workloads and ECTS Calculation

Activities	Number	Duration (hour)	Total Work Load
Course Duration (x14)	14	~~3~~ 2	~~42~~ 28
Laboratory	0	0	0
Application	0	0	0
Specific practical training	0	0	0
Field activities	0	0	0
Study Hours Out of Class (Preliminary work, reinforcement, ect)	14	3	42
Presentation / Seminar Preparation	~~1~~	~~16~~	~~16~~
Project	1	46	46
Homework assignment	1	~~20~~ 34	~~20~~ 34
Midterms (Study duration)	0	0	0
Final Exam (Study duration)	1	30	30
Total Workload			~~150~~ 180

Matrix of the Course Learning Outcomes Versus Program Outcomes

Program Outcomes	**Contrubition level***				
	1	**2**	**3**	**4**	**5**
1. Highly knowledgeable of ethical / value problems that will be aroused by cutting-edge technology in biomedicine					
2. Approaches to value problems will/be aroused in bioethics, health-care ethics- medical ethics and clinical ethics with environmental and civic awareness; is aware of ethical dilemmas and describe ethical problem solving methods particular to these dilemmas; develops and applies original ethical problem solving methods					
3. In his/her institution, recognizes ethics committee (research, clinical, animal experiment, academic...) need and be a leader of founding ethics committees.					
4. In his/her institution, gives ethics consultation in any problem about bioethics and biomedicine to anyone who needs					
5. Systematically evaluates, uses and analyses the institutional and national policies and national and international ethical and legal regulations about bioethics and biomedical ethics					
6. Researches and writes multidisciplinary, interdisciplinary or transdisciplinary, qualitative or quantitative, national or international projects on current/anticipated issues of bioethics (medical ethics)					
7. Uses current developments in bioethics for the benefit of society considering national values and conditions with gender awareness; actively participated in establishing policies, guidelines, national and international ethical and legal regulations about bioethics and biomedical ethics					
8. Be an active member and leader in the national (TTB Etik Komisyonu, TEDMER…) and international (UNESCO, ICH-GCP…) ethics committees and commissions					
9. Prepares and conducts training programmes on bioethics, health-care ethics, medical ethics, clinical ethics and history of medicine for all level of education - baccalaureate, master's, doctorate and when necessary for public .			**X**		

10. Evaluates history of medicine with an evolutionary approach and as a part of the history of science; describes historical development, basic ideas, philosophy and value system of medicine and profession.					**X**
11. Differentiates ground/context and figure in assessing historical phenomenon/events; recognizes casual relationships and uses history to foresee future					**X**
12. Researches and writes multidisciplinary, interdisciplinary or transdisciplinary, national or international projects on history of medicine using methodology of history.					**X**
13. Presents his/her academic knowledge effectively and systematically to the scholarly audiences oral or written format				**X**	

*1 Lowest, 2 Low, 3 Average, 4 High, 5 Highest