Ahsanullah University of Science and Technology (AUST)
Bangladesh

COURSE OUTLINE

1. **Title:** Society, Ethics and Technology

2. **Code:** HUM 2109

3. **Credit hours:** 3.0

4. **Level:** 2nd Year, 1st Semester

5. **Faculty:** Engineering

6. **Department:** Arts and Sciences

7. **Programme:** B. Sc. in Computer Science and Engineering

8. **Synopsis from the Approved Curriculum:**

Historical Perspective of Technology, Social Perspectives of Technology, Ethical Perspectives of Technology, Globalization and Human rights, Information Technology, Biomedical technology, Population and the environment.

9. **Type of course (core/elective):** core

10. **Prerequisite(s) (if any):** N/A

11. **Name of the instructor(s) with contact details and office hours:**

   Mosammat Shamima Nasrain
   Assistant Professor
   Room: 5A01-5A09
   Phone: 01716779575, Extension 1814
   E-mail: Shamima_28@yahoo.com
   Office Hour: Sunday: 11:30am-1:00 pm
                  Wednesday: 10:00 am- 11:00 am

12. **Semester Offered:** Fall, 2018

13. Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Bloom's Taxonomy Level

Sl. No.	COs	POs	Bloom's Taxonomy		
	By the end of this course, students are expected to:		C	A	P
1	Explain the social and cultural dynamics of science and technology.	6	2		
2	Apply ethical principles to guide professional practice.	8	3		
3	Evaluate the effects of technology on population, environment, climate change, and sustainable future.	7	2		

14. Percentages of Assessment Methods

Method	Percentage
Class Performance	10
Quizzes	20
Final Examination	70

15. Week wise distribution of contents and assessment methods

Week	Topics	Assessment Method(s)
1	Definition technology. The origins of science technology and society.	
2	Technology assessment, Evolution of societies on the basis of technology.	
3	Influence of society and cultural issues on technology development in Asia.	Quiz 1
4	Theories of technology, society and innovation systems, Problems arising out of the lack of systematic social control over scientific and technological innovations.	
5	Understanding Ethical Problem: Definition of Ethics, Moral system, Moral dilemma, The difference between Morals, Ethics and Laws. A brief history of Ethical thought,	
6	Ethical theories- utilitarianism, duty ethics, right ethics and virtue ethics, Code of ethics for engineers. Personal vs. Professional ethics. General Ethical Issues in Bio-medical Engineering.	Quiz 2

(2)

7	Concept of Globalization and Human rights, Determinants of human rights. Multinational corporations (MNCs), Moralities of MNCs,		
8	Technology transfer, Appropriate technology, Bhopal tragedy, Impact of Globalization on human rights.		
9	The impact of information technology on productivity and quality of Life- IT investment and productivity, The digital divide, The impact IT on health care costs.	Quiz 3	
10			
11			
12	Computer Ethics- Copyright, Plagiarism, Privacy, The study of population, History and theory of population growth,	Quiz 4	
13	Technology and the environmental deficit. Environmental Ethics, Climate change, Sustainable development.		
14	Review Classes.		

16.References

16.1. Required (if any)

16.2. Recommended (if any)

- Martin, Bridgstock, Davis Butch, (et.al), (1998); Science, Technology and Society, Cambridge University Press, UK.
- R.S. Naagarazan, (2006), Professional Ethics and Human Values, New Age International Publishers, New Delhi.
- George W.Reynolds, (2014), Ethics in Information Technology, Fifth edition, Cengage Learing, USA.
- Charles B. Fledderman, (2012), Engineering Ethics, Fourth Edition, Pearson Education, USA.

Prepared by:	Checked by:	Approved by:
Signature: Mosammat Shamima Nasrain Department: Arts and Sciences Date:	Signature: 1.Dr. Md Saiful Islam Mallik 2.Dr. Mohammad Abdul Kader OBE Program Coordinator, Department: Arts and Sciences Date:	Signature: Professor Dr. Tamanna Afroze Head, Department of Arts and Sciences Date: