COURSE SYLLABUS

Academic Year 2025 - 26, Semester – [Fall / Spring]

GED 132 – Science and Technology in Society

1. COURSE INFORMATION

Course Title:	Science and Technology in Society			
Course Code:	GED 132			
Course Credit:	3-0-3			
Contact Hours:	Lec [45 Hrs], Lab/Non-Lec [0 Hrs] Total: 45 Hrs			
Course Pre-requisite(s):	None			
Course Co-requisite(s):	None			
Course Category:	University Requirement (GE):	✓	Program Requirement:	
Course Type:	Compulsory:		Elective:	✓

2. FACULTY INFORMATION

Instructor Name:	This section will be filled at the time of offering of course.
Lecture/Lab Timings:	
Office Location:	
Office Hours:	
E-mail:	
Office Telephone:	
Course Website:	Course Website on Moodle

3. COURSE DETAILS

3.1 Course Description

This course examines the aims, methods and consequences of scientific enquiry in human history, including the impact of scientific and technological advances on societies, cultures and political systems. The course also discusses some of the philosophical disputes prompted by those advances and the political and their ethical implications on societies.

Course Learning Outcomes (CLOs) and Alignment to GE Learning Outcomes (GELOs)

On successful completion of this course, the student will be able to:

Course Learning Outcomes (CLOs)		GELOs
CLO 1	Describe the scientific and technological heritage from past civilizations and Empires.	**1**
CLO 2	Explain how society, scientific and technological discoveries influence each other.	**2**
CLO 3	Discuss the benefits and disadvantages of scientific and technological discoveries.	**5**

4. TEACHING SCHEDULE

Week No.	Topic Covered in Class	CLOs	Reference/ Course Material	Course Assessment *(Please specify if the assessment is out-of-class)*	
				Assignment Type	Due Date*
1	Presentation of the Class & Syllabus				
2	The History of Science and Technology	1	RB: Toulmin, S. (1963). The Fabric of the Heavens		
3	Think Like a Scientist	2	SR: Bronowski, J. (1969). The Norton Reader		
4	Communication TV/Radio/Video Games,	2	TB: McLuhan, M. (1964). Understanding Media		
5	Technology and Environment	3	SR: Fulford, R. (1999). The Triumph of Narrative		
6	Science, Technology and Innovation in the New Economy	2,3	SB: Postman, N. (1999). Conscientious Objections	Quiz 1	
7	Communication, Internet and Social Networks: From Biotechnology to the Internet	2, 3	TB: McLuhan, M. (1964). Understanding Media		
8	Midterm Exam	1,2,3		Midterm Exam	
9	The Impact of Internet in Society	2, 3	SR: Postman, N. (1998). NewTech 98 Conference		
10	Science and Technology in Medicine: 99 Landmark Technological Advances	1, 3	SB: Corelli, R., & McDonald, M. (1992). MacLean's		
11	Nanotechnology and Society	3	SR: Schick, T. (2003). The Lord of the Rings		
12	Space Technology and Society	1,3	RB: Toulmin, S. (1961). Foresight and Understanding		
13	Different Access to Technology	2,3		Quiz 2	
14-15	Resisting Technology in Different Societies	2,3	SR: Visser, M. (2001). Beyond Fate		
16				**Final Exam**	

**Due date will be included at the time of the offering of the course.*

5. TEACHING PEDAGOGY

This course on "Science and Technology impact on society " combines interactive lectures, case studies, and research-based learning to explore the impact of scientific advancements on society. Students engage with the material through group projects and group discussions.

6. TEXTBOOK/REFERENCE BOOK/COURSE MATERIAL

Textbooks (TB):

a. McLuhan, M. (1964). *Understanding Media*. McGraw Hill. ISBN-13: 978-0071364303.

Reference Books (RB):

a. Toulmin, S. (1963). The Fabric of the Heavens. Penguin Books. ISBN-13: 978-0140202405.

b. Toulmin, S. (1961). Foresight and Understanding: An Enquiry into the Aims of Science. Harper and Row. ISBN-13: 978-0471876876.

c. Bodanis, D. (2001). $E=MC^2$. Anchor Books. ISBN-13: 978-0385337116.

Suggested Readings (SB):

a. Bronowski, J. (1969). *The* Norton *Reader: An Anthology of Expository Prose*. Norton Publishing.
b. Corelli, R., & McDonald, M. (1992, May 4). "Looking at God: New Images From Deep Space Show the Origins of the Universe." *MacLean's*, 38-41.
c. Fulford, R. (1999). *The Triumph of Narrative*. Anansi. ISBN-13: 978-0887846377.
d. Postman, N. (1999). *Conscientious Objections: Stirring up Trouble About Language, Technology and Education*. Random House. ISBN-13: 978-0679406787.
e. Schick, T. (2003). "The Threat of Emerging Technologies." In G. Bassham & E. Bronson (Eds.), *The Lord of the Rings: One Book to Rule Them All*. Open Court. ISBN-13: 978-0812695458.
f. Visser, M. (2001). "Free Fall." *Beyond Fate*. Anansi. ISBN-13: 978-0887846513.

7. LEARNING RESOURCES

Course website on Moodle contains class announcements, lecture notes, homework assignments, etc.

8. COURSE ASSESSMENT AND EVALUATION

The information concerning the appropriate distribution of grade weight amongst various assessment items and their corresponding linkage with the stated CLOs is provided in the following table.

Assessment Items	Grade Weight	Course Learning Outcomes (CLOs)		
	%	1	2	3
Assignments (Quizzes)	40	✓		✓
Midterm Examination	20	✓	✓	
Final Examination	40		✓	✓

9. ASSESSMENT METHODOLOGY

To evaluate student understanding and application of the course content effectively, the following assessment methodology will be implemented:

Assignments (40%): A mix of individual assignments and Written examination ”Quizzes”.

Purpose: To encourage in-depth research and application of theoretical knowledge to real-world scenarios.

Activities: These may include case studies, article reviews, project proposals, and design projects.

Assessment: Evaluated based on clarity, depth of analysis, innovation, and accuracy.

Mid Term Test (20%): Written examination.

Purpose: To assess comprehension of key concepts and theories discussed in the first half of the course.

Format: Combination of multiple-choice questions, short answers, and problem-solving questions.

Assessment: Students will be graded on their ability to recall and apply core concepts effectively.

Final Exam (40%): Cumulative written examination.

Purpose: To evaluate overall understanding and integration of the course material.

Format: Includes multiple-choice, short answer questions, and comprehensive essays.

Assessment: Focus on students' ability to integrate and articulate their knowledge of science and technology impacts broadly.

10. COURSE REQUIREMENTS AND POLICIES

The students are required to fully understand and observe the following policies of the university.

10.1 Attendance Policy

Attending classes is compulsory in all courses. CUD Students will not be allowed to take the final examination if they are absent for 25% or more of the classes in a course. (Students should refer to their respective Department or School/Faculty for additional specific program-related information.)

a. When a student has been absent for 10% of the course an absence reminder would be sent by email.
b. When a student has been absent for 20% of the course a second absence reminder would be sent by e-mail
c. When a student has been absent for 25% of the course a notice of Failure for Non-Attendance will be sent by email and grade “FA” with Grade Point of 0.0 will be awarded.

A student with a verifiable and legitimate reason for missing a class (e.g., hospitalization) may request his instructor not to count such an absence towards the 25%. Such excusable absences must be noted in the Course File Attendance Report.

Should an acceptable explanation for a student’s absenteeism be available, the Dean/Designated Representative of the Faculty concerned may consider the student’s withdrawal without penalty from the particular course. A withdrawal without penalty or any other alpha grade under these circumstances may only be considered with the consent of the Registrar.

10.2 Incomplete Work Policy

Students whose course work is at a passing level but who for verifiable reasons beyond their control are unable to finish course work by the end of a term (or the specified end of a course) may be granted a grade of "Incomplete".

The “I” is not intended to be a permanent grade. It is only a temporary acknowledgment of a legitimate reason for granting a one-time, limited extension to the time normally allowed to complete all course requirements.

Students have up to 12 calendar months after the scheduled end of the course to complete required additional work as determined by the teacher who assigned the “I”, and to thereby qualify for a passing grade.

After 12 calendar months, outstanding “I” grades are converted to “F”.

Thereafter, the student must repeat the course in order to achieve a passing grade.

The number of “Incomplete” courses allowed per semester is established by the School. Please contact the School for further information.

NOTE: An Incomplete grade for a pre-requisite course must be completed before the student is allowed to proceed to the higher-level course unless otherwise approved by the appropriate Academic Administrator (Dean or Designate).

10.3 Academic Integrity

Cheating refers to attempting or using unauthorized materials or obtaining unauthorized assistance in an academic activity, including all types of examinations or evaluations. This may include impersonating another student; looking at another student's materials; using unauthorized notes/books/calculators; talking to other students; using communication devices such as mobile phones or any Bluetooth devices.

Plagiarism includes, but is not limited to, representation of others' work, lending unauthorized assistance, and using strategies or processes with the aim of attaining dishonest grades on tests or examinations. Students may not submit any material created by or acquired from another person or business. Plagiarizing any type of course work will not be tolerated. All instances of plagiarizing shall be documented, presented to the Head/Dean of the program and to the Registrar, and recorded in the student's file. The maximum permissible similarity index limit is 20% for the assignments required to be submitted through Turnitin.

Any violation of the academic integrity policy is a serious offence which will be sanctioned as per the Academic Integrity Policy published in the Student Handbook. Please refer to the Catalogue for further information on student Academic Integrity.

11. GRADING SYSTEM

The University uses the relative grading system which is based on a four-point scale. An overall grade will be assigned on the following grading scale.

Percentage Score	Alpha Grade	GPA Points	Percentage Score	Alpha Grade	GPA Points
90-100	A+	4.0	60-64	C	2.0
80-89	A	3.8	55-59	D+	1.5
75-79	B+	3.5	50-54	D	1.0
70-74	B	3.0	0-49	F	0.0
65-69	C+	2.5			

The students must also read and comprehend the full version of the "Grading System" of the University which is published in the relevant Catalogue.

12. GRADING RUBRICS FOR ASSESSED ELEMENTS

Not Applicable.

13. VERIFICATION

(i) I verify that the contents of this document are up to date.

Instructor's Name and Signature Date

(ii) I have reviewed this course syllabus and state that it complies with CUD policies and guidelines.

_____ _____

Name and Signature of Department Chair/Program Coordinator Date

Note: *This page of the course syllabus is only for the purpose of documentation and therefore it should not be distributed to the students.*