



### University of Kerala

Discipline	ENGLISH				
Course Code	UK1AECENG111				
Course Title	Technology, Science and Imagination 1				
Type of Course	AEC				
Semester	I				
Academic Level	100-199				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	3	2 hours	-	2 hours	4
Pre-requisites	1. Basic Knowledge in English				
Course Summary	This Ability Enhancement Course in English equips students with the necessary communication skills to succeed in their academic and professional careers. The course covers important points of intersection between the sciences and the humanities through exposure to a variety of texts from different disciplines.				

### Detailed Syllabus:

Module	Unit	Content	Hours
<b>I</b>		<b>Society and Science</b>	<b>12</b>
	1	Technology and society – social responsibility – how science can be applied to real life social issues	
		When I Heard the Learn'd Astronomer – Walt Whitman <a href="https://www.poetryfoundation.org/poems/45479/when-i-heard-the-learn-d-astronomer">https://www.poetryfoundation.org/poems/45479/when-i-heard-the-learn-d-astronomer</a>	
		“How PC Mahalanobis devised a survey that has helped India measure inequality for decades” <a href="https://scroll.in/article/843983/how-pc-mahalanobis-devised-a-survey-that-has-helped-india-measure-inequality-for-70-years">https://scroll.in/article/843983/how-pc-mahalanobis-devised-a-survey-that-has-helped-india-measure-inequality-for-70-years</a>  <b>Suggested viewing:</b> Why We Need Engineers Now More Than Ever   Elanor Huntington <a href="https://www.youtube.com/watch?v=WOAgllKD-9o">https://www.youtube.com/watch?v=WOAgllKD-9o</a>	

		Impact of Technology on Society <a href="https://www.geeksforgeeks.org/impact-of-technology-on-society/">https://www.geeksforgeeks.org/impact-of-technology-on-society/</a>	
		<b>Practicum:</b> 1. Speaking on the relationship between technology and society 2. Listening to talks/speeches about what it means to be an engineer 3. Writing an essay about the way scientists have contributed to the betterment of society 4. Reading articles and essays regarding technology and society	
<b>II</b>	<b>Gender and the Sciences</b>		<b>12</b>
		Gender discrimination and bias – gender equity – patriarchy –  Planetarium – Adrienne Rich <a href="https://www.poetryfoundation.org/poems/46568/planetarium-56d2267df376c">https://www.poetryfoundation.org/poems/46568/planetarium-56d2267df376c</a>  Neil Gaiman – The Mushroom Hunters <a href="https://www.themarginalian.org/2017/04/26/the-mushroom-hunters-neil-gaiman/">https://www.themarginalian.org/2017/04/26/the-mushroom-hunters-neil-gaiman/</a>  <b>Suggested viewing:</b> <i>Hidden Figures</i> (2016)  <b>Suggested Reading:</b> “Why do so many women leave the field?” by Susan S Sibley, Harvard Business Review. <a href="https://hbr.org/2016/08/why-do-so-many-women-who-study-engineering-leave-the-field">https://hbr.org/2016/08/why-do-so-many-women-who-study-engineering-leave-the-field</a>	
	8	<b>Practicum:</b> 1. Writing an essay about how the STEM field can become a more inclusive one 2. Speaking about the contributions of a woman or a member of a marginalised gender community to technology 3. Developing a vocabulary of inclusivity within the STEM field 4. Listening to the experiences of women in STEM	
<b>III</b>	<b>Science, Technology and the Future</b>		<b>12</b>
		The industrial revolution – mechanisation of daily life – Changes in quality of life brought by technology – the future of technological advancement – how technology has changed over the years	

	<p>All the Small Things – Dana Martens  <a href="https://danamartens.tech/2016/08/30/all-the-small-things-a-short-story-on-the-evils-of-technology/">https://danamartens.tech/2016/08/30/all-the-small-things-a-short-story-on-the-evils-of-technology/</a></p> <p>Letter to Someone Living Fifty Years from Now – Matthew Olzman  <a href="https://poets.org/poem/letter-someone-living-fifty-years-now">https://poets.org/poem/letter-someone-living-fifty-years-now</a></p> <p><b>Suggested Reading</b>  <i>The Man in Asbestos</i> – Stephen Leacock  <a href="https://gutenberg.net.au/ebooks06/0602131h.html">https://gutenberg.net.au/ebooks06/0602131h.html</a></p> <p><b>Suggested Viewing</b>  The Future of Humanity – Yuval Noah Harari  <a href="https://www.youtube.com/watch?v=XOmQqBX6Dn4">https://www.youtube.com/watch?v=XOmQqBX6Dn4</a></p>	
	<p><b>Practicum:</b></p> <ol style="list-style-type: none"> <li>1. Speaking on the impact of technology on the future of humanity</li> <li>2. Reading works that discuss how technology can be beneficial and deadly.</li> <li>3. Listening to speeches about the ways that the sciences affect future life.</li> <li>4. Writing a short essay on one way that technology has impacted humanity</li> </ol>	
<b>IV</b>	<b>Science, Technology and the Environment</b>	<b>12</b>
	<p>Impact of scientific advancements on the environment – sustainable development – coexistence of technology and nature – environmental crises – global warming – environmental disasters</p> <p>“All Watched Over By Machines of Loving Grace” – Richard Brautigan  <a href="https://allpoetry.com/All-Watched-Over-By-Machines-Of-Loving-Grace">https://allpoetry.com/All-Watched-Over-By-Machines-Of-Loving-Grace</a></p> <p>Greta Thunberg’s speech at the UN Climate Action Summit 2019  <a href="https://www.npr.org/2019/09/23/763452863/transcript-greta-thunbergs-speech-at-the-u-n-climate-action-summit">https://www.npr.org/2019/09/23/763452863/transcript-greta-thunbergs-speech-at-the-u-n-climate-action-summit</a></p> <p><b>Suggested Viewing</b>  Nausicaa of the Valley of the Wind (1984)</p> <p><b>Suggested Reading:</b>  Deepwater Horizon Oil Spill -  <a href="https://www.britannica.com/event/Deepwater-Horizon-oil-spill/Environmental-costs">https://www.britannica.com/event/Deepwater-Horizon-oil-spill/Environmental-costs</a></p>	
	<b>Practicum:</b>	

		1. Write an essay on how advancements in technology can be beneficial to the environment 2. Listen to discussions on climate change and other environmental concerns 3. Speak about an environmental issue being faced in one's locality 4. Reading articles about various events that have had significant impact on the environment	
<b>V</b>	<b>Perceiving Our Planet</b>		<b>12</b>
		Space Exploration – the Space Race - Space Travel – The Earth's place in the universe	
		Third Rock from the Sun –Dorianne Laux <a href="https://poets.org/poem/third-rock-sun">https://poets.org/poem/third-rock-sun</a>  A Pale Blue Dot – Carl Sagan <a href="https://www.planetary.org/worlds/pale-blue-dot">https://www.planetary.org/worlds/pale-blue-dot</a>  <b>Suggested Viewing</b> Apollo 13 (1995) Mission Mangal (2019)	
		<b>Practicum:</b> 1. Write an essay on the history of mankind's aspirations to the stars 2. Read about the experiences of astronauts who have travelled to space 3. Speak about the challenges and promises of space exploration in the future 4. Develop a vocabulary of various terms based on space exploration	

**References:****Online Links:**

Purdue Online Writing Lab (OWL): <https://owl.purdue.edu/>

British Council Learn English: <https://learnenglish.britishcouncil.org/>

TED Talks: <https://www.ted.com/>

Oxford Free English Lessons: [Free English Lessons - Oxford Online English](#)

**Texts and Journal Articles:**

Crystal, David. *A Dictionary of Linguistics and Phonetics*. Shang Wu Yin Shu Guan, 2002.

Foster, Thomas C. *How to Read Literature like a Professor: A Newly Expanded, Lively, and Entertaining Guide to Reading between the Lines*. HarperPerennial, 2024.

Jones, Daniel, et al. *Cambridge English Pronouncing Dictionary*. Cambridge University Press, 2015.

Leben, William R., Brett Kessler, and Keith Denning, *English Vocabulary Elements: A Course in the Structure of English Words*, 3rd edn (New York, 2023; online edn, Oxford Academic, 19 Jan. 2023), <https://doi.org/10.1093/oso/9780190925475.001.0001>

McWhorter, Kathleen T. *The Writer's Express: A Paragraph and Essay Text with Readings*. Houghton Mifflin Co., 2001.

Prose, Francine. *Reading Like a Writer: A Guide for People Who Love Books and for Those Who Want to Write Them*. Union Books, 2012.

Strunk, William, and E. B. White. *The Elements of Style*. Macmillan, 1979.

Wallace, Catherine. *Critical Reading in Language Education*. Palgrave Macmillan, 2005.

Roach, Peter. *English Phonetics and Phonology: A Practical Course*. 4th ed., Cambridge;

New York, Cambridge University Press, 2009.

Bhatnagar, Nitin. *Effective Communication and Soft Skills*. Pearson, 2011.

Moothathu, V K. *Concise English Grammar*. 26 Jan. 2013.

Bakshi, Raj N. *A Course in English Grammar*. India: Orient Black Swan, 2000

Fernandez, Agna. *Generic Skills for Employability*. UK: Cambridge University Press, 2020

Shobha, K N. Lourdes Javani Rayen. *Communicative English: A Workbook*. UK: Cambridge University Press, 2023

V, Syamala. *A Textbook of English Phonetics and Structure for Indian Students*. Sharath Ganga Publications, 2010.

**Course Outcomes**

<b>No.</b>	<b>Upon completion of the course the graduate will be able to</b>	<b>Cognitive Level</b>	<b>PSO addressed</b>
CO-1	Identify and analyse various barriers to effective listening in spoken communication	U, R, An	1,6
CO-2	Apply effective listening skills for different purposes and demonstrate proper communication etiquette for different situations.	R, U, Ap,	2,5,6
CO-3	Enhance their analytical writing skills through real life practical situations	U, An,	6,9,12
CO-4	Develop an understanding of the multidisciplinary of science and the humanities	An, Ap	2,9,11
CO-5	Create pieces of writing which proves the multidisciplinary of language.	An, Ap,C	6,12,13,

**R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create**

*Note: 1 or 2 COs/module*

**Name of the Course: Credits: 4:0:0 (Lecture:Tutorial:Practical)**

<b>CO No.</b>	<b>CO</b>	<b>PO/PS O</b>	<b>Cognitive Level</b>	<b>Knowledge Category</b>	<b>Lecture (L)/Tutorial (T)</b>	<b>Practical (P)</b>
CO-1	Identify and analyse various barriers to effective listening in spoken communication	PO 4,5,7  PSO 1,6	U, R, An	F, C	L	

CO-2	Apply effective listening skills for different purposes and demonstrate proper communication etiquette for different situations.	PO 1,3,4,5, 8  PSO 2,5,6	R, U, Ap,	P,M	L	
CO-3	Enhance their analytical writing skills through real life practical situations	PO 1,2,4,5, 6,8  PSO 6,9,12	U, An,	C	L	
CO-4	Develop an understanding of the multidisciplinary of science and the humanities	PO 1,2,4,8  PSO 2,9,11	An, Ap	P	L	
CO-5	Create pieces of writing which proves the multidisciplinary of language.	PO 3,4,5,6  PSO 6,12,13,	An, Ap,C			P

**F-Factual, C- Conceptual, P-Procedural, M-Metacognitive**

**Mapping of COs with PSOs and POs :**

	PSO 1	PSO 2	PSO 3	PSO4	PS O5	PS O6	PO1	PO2	PO3	PO4	PO5	PO6
CO 1	2					3				2	3	
CO 2		2			3	1	3		2	1	2	
CO 3						2	2	1		2	1	3
CO 4		3					2	3		1		
CO 5						3			3	2	1	2

**Correlation Levels:**

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

**Assessment Rubrics:**

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

**Mapping of COs to Assessment Rubrics :**