DSE-02A : Discipline Specific Elective - 2
Technology and Human Interaction

B.A. (Hons.) Humanities & Social Sciences - Semester IV
Cluster Innovation Centre, University of Delhi

Credit Distribution, Eligibility and Pre-requisites of the Course						
Course Title & Code	Credits	Credit Distribution			Eligibility Criteria	Pre-requisite
		L	T	P		
Technology and Human Interaction (UPC: 3123102007)	4	1	0	3	Class XII Pass	Students must be familiar with the concepts (or related concepts) taught under Technology & Society (DSC-02)
L = Lecture; T = Tutorial; P = Practical/Practice; UPC = Unique Paper Code						

Learning Objectives
The learning objectives of this course are as follows:

- To make the student learn the intersection between technological development and social progress.
- To equip students with appropriate tools and techniques to solve social problems through technological interventions.

Learning Outcomes
Upon completion of this course,

- students will be skilled at drawing connections between technological development and social progress.
- students will be skilled at using suitable tools to solve social problems through technological interventions.

Outline of DSE-02A

The ubiquity of technical tools around us has forced humanity to think about the implications of this ever-evolving interaction. The sheer scale and speed of technological development in the last century is unprecedented and therefore, it has become more important than ever before to study and analyse human-technology interface. This is an intervention-based module and therefore the students will be guided to bring out technological solutions to social problems. Students will explore the possibilities of using traditional skills and techniques as well as modern technology for helping the problem-solving process especially in slums and rural areas. The scope of this paper would also include engaging with issues arising out of the application of Artificial Intelligence for social good. Students will be encouraged to involve various stakeholders, the concerning agencies and other communities pursuing similar goals.

Theoretical Component (15 hours)

- Overview of technology and human interaction
- Actor-Network Theory
- Technology and social change
- Techno-ethics
- Affordances and Constraints

Indicative Themes

- Impact of technology on various aspects of human interactions
- Ethical implications of technology

- Digital well-being
- Human-Centred Design

Practical component (90 hours)

Depending on the theme chosen by the group of students the practical component of this paper may entail learning through practical exercises like identifying relevant fields/cases, learning to analyse them objectively in the sociological context, interviews with experts and end users of technology, observations, group discussions with stakeholders, designing public awareness campaigns with regard to human interaction with technology, conducting digital literacy campaigns, participating in and conducting workshops, etc., or any other practical deemed fit by the teacher in the context of Technology and Human Interaction. Fieldwork is a practical component integral to this paper. Other compulsory practical components include:

- Basics of Computers
- Internet and website designing
- Virtual Worlds (like SecondLife or MineCraft)
- Designing an interview schedule
- Administering Surveys
- Conducting interviews
- Ingesting, processing and analysing data

Readings

1. Latour, B. (2005). *Reassembling the Social: An Introduction to Actor–Network-Theory*. Oxford University Press.
2. Ihde, D. (1990). *Technology and the Lifeworld: From Garden to Earth*. Indiana University Press.
3. Feenberg, A. (2017). *Technosystem: The Social Life of Reason*. Harvard University Press.
4. Verbeek, P.-P. (2011). *Moralizing Technology: Understanding and Designing the Morality of Things*. University of Chicago Press.
5. Hutchby, I. (2001). "Technologies, Texts and Affordances." *Sociology*, 35(2), 441–456.
6. Winston, B. (1998). *Media Technology and Society: A History from the Telegraph to the Internet*. Routledge.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

*****

DSE-02B : Discipline Specific Elective - 2
Technology and Human Interaction

B.A. (Hons.) Humanities & Social Sciences - Semester IV
Cluster Innovation Centre, University of Delhi

Credit Distribution, Eligibility and Pre-requisites of the Course						
Course Title & Code	Credits	Credit Distribution			Eligibility Criteria	Pre-requisite
		L	T	P		
Constructively Engaging with Social Media (UPC: 3123102008)	4	1	0	3	Class XII Pass	Students must be familiar with the concepts (or related concepts) taught under Technology & Society (DSC-02)
L = Lecture; T = Tutorial; P = Practical/Practice; UPC = Unique Paper Code						

Learning Objectives
The learning objectives of this course are as follows:

- To engage students with various dimensions, debates and discourses related to social media.
- To analyse the impact of social media on society, culture and individuals.
- To make students learn effective social media strategies for education, innovations and entrepreneurship.

Learning Outcomes
Upon completion of this course,

- students will be able to engage with the various dimensions, debates and discourses related to social media.
- students will be able to analyse and assess various impacts of social media.
- students will be skilled in using social media strategies in the areas of education, innovations and entrepreneurship.

Outline of DSE-02B

The advent of social media has revolutionised human communication and relations in unimaginable ways. It has surmounted the geographical distance and national boundaries connecting millions across the globe. However, this has also presented new challenges from the point of view of an individual, culture and society. This is an intervention-based module and therefore students will be mentored to constructively use social media towards their individual growth as well as for public good. By understanding the unique character of various social media platforms and their potential, students will be encouraged to use these tools for social good. Students will work towards developing awareness campaigns exploiting strengths of social media, content creation and utilising social media potential for social innovations and entrepreneurship.

Theoretical Component (15 hours)

- History and evolution of social media
- Network Theory
- Technological Determinism
- Mediated Communication
- Surveillance Capitalism

Indicative Themes

- Social media and awareness campaigns

- Social media as an alternative to mainstream media
- Using social media for crowdsourcing
- Using social media for start-ups

Practical component (90 hours)

Depending on the theme chosen by the group of students the practical component may entail learning through practical exercises like identifying relevant social media platforms/cases/strategies/fields, learning to analyse them objectively and critically in a sociological context, interviews with experts and end users of technology, observations, group discussions with stakeholders, designing social media strategies in the areas of education, innovations and entrepreneurship, awareness campaigns with regard to social media platforms use and abuse, participating in and conducting workshops, etc., or any other practical deemed fit by the teacher in the context of Constructively engaging with Social Media. Fieldwork is a practical component integral to this paper. Other compulsory practical components include:

- Social Media Site Management: Making and managing profiles on Facebook, Instagram, X, LinkedIn, Pinterest etc.
- Making and uploading videos on YouTube
- Safe Social Media Practices

Readings

1. Castells, M. (2010). *The Rise of the Network Society*. Wiley-Blackwell.
2. McLuhan, M. (1964). *Understanding Media: The Extensions of Man*. McGraw-Hill.
3. Boyd, D., & Ellison, N. (2007). "Social Network Sites: Definition, History, and Scholarship." *Journal of Computer-Mediated Communication*, 13(1).
4. Barabási, A.-L. (2003). *Linked: How Everything Is Connected to Everything Else*. Plume.
5. Zuboff, S. (2019). *The Age of Surveillance Capitalism*. PublicAffairs.
6. Postman, N. (1993). *Technopoly: The Surrender of Culture to Technology*. Vintage.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

*****

DSE-02C : Discipline Specific Elective - 2
Technology, Safety and Security

B.A. (Hons.) Humanities & Social Sciences - Semester IV
Cluster Innovation Centre, University of Delhi

Credit Distribution, Eligibility and Pre-requisites of the Course						
Course Title & Code	Credits	Credit Distribution			Eligibility Criteria	Pre-requisite
		L	T	P		
Technology, Safety and Security (UPC: 3123102009)	4	1	0	3	Class XII Pass	Students must be familiar with the concepts (or related concepts) taught under Technology & Society (DSC-02)
L = Lecture; T = Tutorial; P = Practical/Practice; UPC = Unique Paper Code						

Learning Objectives
The learning objectives of this course are as follows:

- To make students understand the various issues and challenges related to security and safety of the digital data.
- To guide students for a comprehensive assessment of safety and security measures related to technology.
- To enable students to bring out effective strategies of safety and security in the digital space.

Learning Outcomes
Upon completion of this course,

- students will be alert to different types of risks and vulnerabilities in the digital space.
- students will be able to analyse the ethical and social implications of data security and safety.
- students will be able to develop effective strategies for safety and security in the digital space.

Outline of DSE-02C
While technology has provided us with excellent tools to monitor and secure our public spaces, it has also presented us with issues of privacy and cyber-crimes like phishing. This is an intervention-based paper aimed at understanding digital security and safety challenges. Once the students understand these issues they will attempt to bring out effective strategies and communicate the same to society through workshops, seminars and talks, awareness campaigns, publishing research and newspaper articles, producing mass media programmes such as blogs, vlogs, and other creative mediums. The students will be encouraged to involve various stakeholders, the concerning agencies and other communities pursuing similar goals.

Theoretical Component (15 hours)

- Digital literacy
- Legal literacy relevant to privacy and individual rights
- Understanding the digital world
- Strengths and challenges of digital communication
- Digital ethics

Indicative Themes

- Digital literacy campaigns
- Cyber frauds
- Cyber crimes

Practical component (90 hours)

Depending on the theme chosen by the group of students the practical component may entail learning through practical exercises like identifying relevant issues pertaining to technology, safety and security, responsible use of digital platforms and related cases/strategies/fields, interviews/interactions with experts and end users of technology, observations, group discussions with stakeholders, designing public awareness campaigns on educating the people on the safety and security dimensions of using the digital platforms in everyday life, participating in and conducting workshops, etc., or any other practical deemed fit by the teacher. Fieldwork is a practical component integral to this paper. Students will be provided with the practical knowledge in the following areas:

- Computer Security (antivirus installation and updation)
- Cloud Security (how to protect your data)
- Browser Security
- ATM and UPI Security
- Social Media Security

Readings

1. Belshaw, D. (2014). *The Essential Elements of Digital Literacies*.
2. Livingstone, S. (2004). "Media Literacy and the Challenge of New Information and Communication Technologies." *The Communication Review*, 7(1).
3. Floridi, L. (2013). *The Ethics of Information*. Oxford University Press.
4. Solove, D. J. (2021). *Understanding Privacy*. Stanford University Press.
5. Rheingold, H. (2012). *Net Smart: How to Thrive Online*. MIT Press.
6. boyd, D. (2014). *It's Complicated: The Social Lives of Networked Teens*. Yale University Press.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

*****

DSE-02D : Discipline Specific Elective - 2
Technoliteracy: Challenges and Opportunities

B.A. (Hons.) Humanities & Social Sciences - Semester IV
Cluster Innovation Centre, University of Delhi

Credit Distribution, Eligibility and Pre-requisites of the Course						
Course Title & Code	Credits	Credit Distribution			Eligibility Criteria	Pre-requisite
		L	T	P		
Technoliteracy: Challenges and Opportunities (UPC: 3123102010)	4	1	0	3	Class XII Pass	Students must be familiar with the concepts (or related concepts) taught under Technology & Society (DSC-02)
L = Lecture; T = Tutorial; P = Practical/Practice; UPC = Unique Paper Code						

Learning Objectives
The learning objectives of this course are as follows:

- To make students understand the various issues and challenges related to digital literacy in the context of diverse demography.
- To sensitize and train students on digital literacy.

Learning Outcomes
Upon completion of this course,

- students will be able to analyse the various issues and challenges related to digital literacy.
- students will be able to develop training programs/modules on digital literacy.
- students will be able to assess the effectiveness of digital literacy training programs.

OUTLINE OF DSE-02D
Technology has greatly enhanced the quality of life. The advent of World Wide Web, at the fag end of the last century itself has revolutionised how societies interact and transact. In this context, developing countries have a challenge to not just innovate and adopt new technologies but also take their citizenry along so that they are enabled to use it for their own good. This is an intervention-based module and therefore the students will be guided to identify areas and communities where techno-literacy is lacking. They will also be trained and sensitised to be able to carry out such training and sensitisation workshops/ talks/ discussions/ plays etc. in the concerned communities. Students will be encouraged to involve various stakeholders, the concerning agencies and other communities pursuing similar goals.

Theoretical Component (15 Hours)

- The concept and context of technoliteracy, its relevance and need
- Technological determinism
- Digital divide
- Challenges and barriers in technoliteracy

Indicative Themes

- Digital literacy
- Digital divide
- Opportunities, challenges and barriers in technoliteracy

Practical component (90 Hours)

Depending on the theme chosen by the group of students the practical component may entail learning through practical exercises like identifying relevant issues pertaining to technoliteracy, responsible use of digital platforms and related cases/strategies/fields, interviews/interactions with experts and end users of technology, group discussions with stakeholders, designing digital literacy campaigns for enhancing people's everyday experience in the context of use of digital platforms in their professional and personal lives, or any other practical deemed fit by the teacher. Fieldwork is a practical component integral to this paper. Students will be provided practical knowledge of the essential cloud services and other cloud storage platforms, including:

- DigiLocker (cloud storage to store important documents)
- BHIM (for cashless transactions)
- UMANG (platform to access all government departments and their services)
- MyGov (platform to offer suggestions to central ministries and associated organizations)
- Onedrive/GoogleDrive/Dropbox/iCloud

Readings

1. Bawden, D. (2001). "Information and Digital Literacies: A Review of Concepts." *Journal of Documentation*, 57(2).
2. Warschauer, M. (2003). *Technology and Social Inclusion: Rethinking the Digital Divide*. MIT Press.
3. Jenkins, H. (2009). *Confronting the Challenges of Participatory Culture*. MIT Press.
4. Buckingham, D. (2015). *Defining Digital Literacy*. Nordic Journal of Digital Literacy.
5. Mossberger, K., Tolbert, C. J., & Stansbury, M. (2003). *Virtual Inequality: Beyond the Digital Divide*. Georgetown University Press.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

*****

DSE-02E : Discipline Specific Elective - 2
Technology and Education

B.A. (Hons.) Humanities & Social Sciences - Semester IV
Cluster Innovation Centre, University of Delhi

Credit Distribution, Eligibility and Pre-requisites of the Course						
Course Title & Code	Credits	Credit Distribution			Eligibility Criteria	Pre-requisite
		L	T	P		
Technology and Education (UPC: 3123102011)	4	1	0	3	Class XII Pass	Students must be familiar with the concepts (or related concepts) taught under Technology & Society (DSC-02)
L = Lecture; T = Tutorial; P = Practical/Practice; UPC = Unique Paper Code						

Learning Objectives
The learning objectives of this course are as follows:

- To make students understand the use of technology in the teaching-learning process.
- To equip students with effective technological tools and skills that will meet the varied educational needs of a diverse population.

Learning Outcomes
Upon completion of this course,

- students will have knowledge about the role and importance of technology in the teaching-learning process.
- students will be skilled in using technology to meet the challenges in education.

Outline of DSE-02E
Like all aspects of human institutions the education system has also been transformed by technology from time to time. However, with the advancement of the world wide web and artificial intelligence there is a fundamental question on the need of human agency as a mediator in the process of education. Therefore, it has become important on one hand to harness the potential of technology for imparting education on the other hand it has become equally important to assess and reinvent the role of human agency in this process. This is an intervention-based module and therefore the students will be guided to explore the role and importance of technology in the teaching-learning process, especially in India. The students will be equipped with a specific set of tools and skills to create applications and platforms to help people and institutions engaged with imparting education. They will work towards improving educational accessibility in underprivileged communities and areas.

Theoretical Component (15 Hours)

- Use of technology in teaching-learning process
- Potential of technology to bridge the gap between illiteracy and education in India
- Issues and challenges in use of technology in education

Indicative Themes

- Access to education through digital media
- Developing educational tools using technology
- issues and challenges in use of technology in education

Practical component (90 Hours)

Depending on the theme chosen by the group of students the practical component may entail learning through practical exercises like identifying relevant issues pertaining to technology, and education, creative use of digital platforms in pedagogy as well as related cases/strategies/issues relating to scaling the access to education in countries of Global South, interviews/interactions with experts, observations, group discussions with stakeholders especially the mentors and students, participating in and conducting workshops, etc., or any other practical deemed fit by the teacher. Fieldwork is a practical component integral to this paper. Other compulsory practical components include the following:

- MS Office (Word, Excel and Powerpoint)
- Statistical Package for Social Sciences (SPSS)
- Reference Management Tools: Mendeley/Zotero/Endnote
- Google Classroom/Zoom/Google Meet/Google Drive
- Learning Management Systems (LMS) and Massive Open Online Courses (MOOCs)

Readings

1. Selwyn, N. (2011). *Education and Technology: Key Issues and Debates*. Bloomsbury.
2. Mishra, P., & Koehler, M. J. (2006). "Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge." *Teachers College Record*.
3. Kozma, R. B. (2003). "Technology and Classroom Practices." *Journal of Research on Technology in Education*.
4. Trucano, M. (2005). *Knowledge Maps: ICT in Education*. World Bank.
5. UNESCO. (2018). *ICT in Education in Asia: A Comparative Analysis of ICT Integration and E-Readiness in Schools*.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

*****

DSE-02F : Discipline Specific Elective - 2
Technology and Health

B.A. (Hons.) Humanities & Social Sciences - Semester IV
Cluster Innovation Centre, University of Delhi

Credit Distribution, Eligibility and Pre-requisites of the Course						
Course Title & Code	Credits	Credit Distribution			Eligibility Criteria	Pre-requisite
		L	T	P		
Technology and Health (UPC: 3123102012)	4	1	0	3	Class XII Pass	Students must be familiar with the concepts (or related concepts) taught under Technology & Society (DSC-02)
L = Lecture; T = Tutorial; P = Practical/Practice; UPC = Unique Paper Code						

Learning Objectives
The learning objectives of this course are as follows:

- To make students aware about the role of technology in the assessment, diagnosis and treatment in healthcare.
- To encourage students to use technology for health promotion in society.

Learning Outcomes
Upon completion of this course,

- students will be able to design innovative strategies that will educate the public on the role of technology in assessment, diagnosis and treatment in healthcare.
- students will be skilled in using technology for health promotion in society.

Outline of DSE-02F
Modern lifestyle has presented humanity with a myriad health issues which has put immense pressure on the conventional methods of diagnosis and treatment of diseases and/ disorders. With the advent and tremendous progress in technology, delivery of healthcare services has not only become faster, easier and cost-effective, but it has also made prevention and awareness programmes more accessible. Today, we have access to innovative tools and devices that make it easy to assess health, do quicker diagnosis and receive faster treatments. This paper is thus designed to introduce students to study and evaluate the intersection of technology and health in being able to provide and promote better healthcare facilities.

Theoretical Component (15 Hours)

- Health and well-being
- Technology and health
- Social medicine and community health in light of technology
- Technology and mental health

Indicative Themes

- Technology and health and well-being
- Technological advances in healthcare facilities
- Issues of ethics in use of technology in healthcare services
- Social Medicine and Community Health

Practical component (90 Hours)
Depending on the theme chosen by the group of students the practical component may entail learning through practical exercises like identifying relevant issues pertaining to technology and health,

responsible use of technology for meeting the challenges in the health sector and related cases/strategies/fields, interviews/interactions with experts, group discussions with stakeholders, designing public awareness campaigns on educating the people on the health and wellbeing dimensions of technology, participating in and conducting workshops, etc., or any other practical deemed fit by the teacher. Fieldwork is a practical component integral to this paper. Other compulsory practical components include:

- ICT in Healthcare (for health education and patient engagement - use of mobile apps, websites and online communities to educate patients about their health and to track their health information)
- GIS Mapping (to map the spread of diseases, track patient data and plan public health campaigns)
- Health Apps - ABHA, Aarogya Setu, e-Sanjeevani

Readings

1. Lupton, D. (2015). *Digital Health: Critical and Cross-Disciplinary Perspectives*. Routledge.
2. Topol, E. (2015). *The Patient Will See You Now*. Basic Books.
3. Adler, N., & Stewart, J. (2010). "Health Disparities Across the Lifespan." *Annual Review of Public Health*.
4. WHO. (2021). *Digital Health Strategy*.
5. Norman, C. D., & Skinner, H. A. (2006). "eHealth Literacy." *Journal of Medical Internet Research*.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch University of Delhi, from time to time.

*****