

DISCIPLINE SPECIFIC ELECTIVE: 25

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE 25 Psychology And Technology	4	3	1	0	Class XII Passed	Nil

Learning Objectives

- To explore the intersection of psychology and technology.
- To understand the various ways in which technology impacts our behavior, cognition, and emotions.
- To explore and study the psychological theories that underlie our interactions with technology, as well as the ethical considerations that arise when technology is used to manipulate or influence human behavior.

Learning outcomes

The Learning Outcomes of this course are as follows:

- The students will be able to understand the psychological principles that underlie our interactions with technology;
- The students will be able to examine the ways in which technology impacts our behavior, cognition, and emotions;
- The students will be able to comprehend the ethical considerations that arise when technology is used to manipulate or influence human behavior;
- The students will be able to carry out critical thinking on the role of technology in our lives

Syllabus DSE-25

UNIT – I Introduction to Psychology and Technology (12 hours)

Overview of the intersection between Psychology and Technology; Theoretical Perspectives; Ethical considerations in psychology and technology research. Current

trends and future directions in the field; Brief introduction to AI; Orientation to use of technology in quantitative and qualitative data analysis.

UNIT – II Technology and Intra-personal processes (12 hours)

How technology affects our attention; The effects of technology on memory processes; Online identity and self-presentation; Impact of technology on physical and psychological well-being.

UNIT – III Technology and Interpersonal processes (12 hours)

Impact of technology on relationships: Technology mediated relationships (romantic relationship, friendships, communities online.); Technology and its role in formal and informal communication patterns; The impact of technology on decision-making processes (Automation and human judgment in decision-making).

UNIT – IV Technology and Society (9 hours)

Bidirectional relationship of technology and society; Technology and Health (Assistive technology and rehabilitation; telemedicine; health apps); Psychological implications of Technology; Technology and education.

Suggestive Tutorial Activities (15 hours)

- Assign a reflective writing task where students share personal experiences related to technology and its influence on their behavior, cognition, or emotions.
- Facilitate a discussion on the advantages and disadvantages of applying different theoretical perspectives to the study of psychology and technology.
- Present case studies involving ethical dilemmas in technology research, and engage students in discussions on how these dilemmas can be addressed.
- Conduct a brainstorming session on emerging trends in technology and how they might impact psychology.
- Group discussions on investigating how technology influences memory consolidation and retrieval.
- Organize a memory game activity using both traditional and digital methods, discussing the outcomes in terms of memory processes.
- Have students create and analyze their online profiles, discussing how they present themselves and the potential impact on self-perception.
- Organize a role-playing scenario where students embody different online personas to understand the psychological aspects of self-presentation.
- Organize a wellness day where students practice mindfulness and discuss how technology can both positively and negatively affect well-being.
- Assign case studies exploring how technology affects various types of relationships (romantic, friendships, online communities).
- Assign a group project where students create scenarios depicting the challenges and benefits of technology-mediated relationships.
- Assign a research project on how societal norms and values influence the development and adoption of new technologies.
- Students can design/simulate educational technology tools with a focus on enhancing psychological well-being.

Essential/recommended readings

- Amichai-Hamburger, Y. (Ed.). (2020). *The social net: Understanding our online behavior* (2nd ed.). Oxford University Press. ISBN: 978-0198748281
- Gazzaley, A., & Rosen, L. D. (2020). *The distracted mind: Ancient brains in a high-tech world*. MIT Press. ISBN: 978-0262537742
- Kaye, L. K. (2021). *Technology and society: A psychological perspective*. Routledge. ISBN: 978-0367536251
- Kool, V. K., & Agrawal, R. (2020). *Psychology of technology*. Springer. ISBN: 978-3030323356
- Marston, H. R., & Freeman, S. (2022). *Digital health: Psychological perspectives on technology and well-being*. Springer. ISBN: 978-3030869625
- Prescott, T. J., Mitchinson, B., & Squire, L. J. K. (2021). *The psychology of artificial intelligence*. Routledge. ISBN: 978-0367543112
- Rosen, L. D., & Samuel, A. (2022). *Digital psychology: Understanding human behavior in the online world*. Oxford University Press. ISBN: 978-0190652975
- Williams, K., & Duck, S. (2023). *Human-computer interaction and social relationships*. Routledge. ISBN: 978-1138608276

Suggestive readings

- Bargh, J. A., & McKenna, K. Y. (2004). The internet and social life. *Annual Review of Psychology*, 55, 573-590.
- Baym, N. K. (2015). *Personal connections in the digital age* (2nd ed.). Polity.
- Carr, N. (2010). *The shallows: What the internet is doing to our brains*. W. W. Norton & Company.
- Chatterjee, A., & Sinha, B. (2022). Ethical considerations in human-technology interaction. *Journal of Technology and Ethics*, 12(2), 45-63.
- Chou, W. Y., Hunt, Y. M., Beckjord, E. B., Moser, R. P., & Hesse, B. W. (2009). Social media use in the United States: Implications for health communication. *Journal of Medical Internet Research*, 11(4), e48.
- Frith, E. (2020). *The psychology of technology: How digital media and artificial intelligence shape our minds*. Routledge.

- Greenfield, S. (2014). *Mind change: How digital technologies are leaving their mark on our brains*. Random House.
- Joinson, A. N. (2007). *Understanding the psychology of internet behaviour: Virtual worlds, real lives*. Palgrave Macmillan.
- Kiesler, S., Siegel, J., & McGuire, T. W. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist*, 39(10), 1123-1134.
- Klein, G., Calderwood, R., & Clinton-Cirocco, A. (2018). *Decision making in action: Models and methods*. Routledge.
- Margetts, H., John, P., Reissfelder, S., & Escher, T. (2016). *Digital era governance: IT corporations, the state, and e-government*. Oxford University Press.
- Newport, C. (2019). *Digital minimalism: Choosing a focused life in a noisy world*. Portfolio/Penguin.
- Reeves, B., & Nass, C. (1996). *The media equation: How people treat computers, television, and new media like real people and places*. Cambridge University Press.
- Rosen, L. D. (2013). *Rewired: Understanding the iGeneration and the way they learn*. Palgrave Macmillan.
- Rothbaum, B. O., & Hodges, L. (1999). The use of virtual reality exposure in the treatment of anxiety disorders. *Behavior Modification*, 23(4), 507-525.
- Small, G., & Vorgan, G. (2008). *iBrain: Surviving the technological alteration of the modern mind*. Harper Collins.
- Turkle, S. (2005). *The second self: Computers and the human spirit*. MIT Press.
- Turkle, S. (2011). *Alone together: Why we expect more from technology and less from each other*. Basic Books.

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