

DISCIPLINE SPECIFIC ELECTIVE COURSE – 16: INTERSECTIONS OF PSYCHOLOGY AND TECHNOLOGY

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-16 Intersections of Psychology and Technology	4	3	1	0	Passed Class 12 th	Nil

Learning Objectives

The Learning Objectives of this course are as follows:

- Identifying and defining key terms and concepts related to psychology and technology.
- Analyzing and synthesizing research findings related to the impact of technology on human behavior and cognition.
- Evaluating and critiquing the strengths and limitations of different theoretical frameworks and research methodologies used in psychology and technology research.
- Applying course concepts and theories to real-world examples of technology use and behavior.
- Collaborating with peers to develop research proposals, presentations, and other group projects related to psychology and technology.
- Developing and presenting written and oral arguments that reflect critical thinking and effective communication skills.

Learning Outcomes

After completing this course, the student will be able to:

- Demonstrate an understanding of the theoretical foundations of psychology and technology, including cognitive and behavioral theories of human-technology interaction, social and cultural theories of technology adoption and diffusion, and ethical considerations in psychology and technology research.
- Critically evaluate the impact of technology on attention, memory, emotion, communication, decision-making, and society.
- Analyze the opportunities and challenges presented by emerging technologies and their potential impact on human behavior and cognition.
- Apply course concepts to real-world issues or problems related to psychology and technology, and develop solutions or recommendations based on research and analysis.
- Communicate effectively about the intersection of psychology and technology, both orally and in writing, and engage in productive discussions and debates on related topics.

SYLLABUS OF DSE 16

UNIT 1 (12 hours)

An Introduction to Psychology and Technology

- Overview of the intersection between psychology and technology
- Ethical considerations in psychology and technology research
- Current trends and future directions in the field

UNIT 2 (12 hours)

Technology and Intra-personal Processes

- How technology affects our attention and memory: Digital amnesia
- Online identity and self-presentation
- Impact of technology on physical and psychological well-being

UNIT 3 (12 hours)

Technology and Inter-personal Processes

- Technology mediated relationships (romantic relationship, friendships, communities online.)
- Role of technology in shaping formal and informal communication patterns
- The impact of technology on decision-making processes

UNIT 4 (9 hours)

Technology and Society

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

Practical component – NIL

Tutorial component (15 Hours)

Suggestive Tutorial Activities

- Present scenarios where psychology and technology intersect, such as using AI for mental health therapy or tracking personal data through health apps. Divide the class into groups to debate the ethical implications, focusing on privacy, consent, and accessibility.
- Assign students recent research papers or articles on emerging trends in psychology and technology (e.g., virtual reality for therapy). Students present a summary and discuss the future direction of the field.
- Ask students to survey peers or family members about their reliance on digital devices for memory tasks (e.g., remembering birthdays, appointments). Analyze and discuss the findings as a group.
- Students create mock social media profiles reflecting how individuals may present themselves differently online versus offline. Groups analyze and discuss the differences in self-presentation.

- Have students maintain a journal for a week, reflecting on their technology usage (e.g., screen time) and its impact on their physical and psychological well-being.
- Provide case studies on technology-mediated relationships, such as online dating or virtual communities. Ask students to analyze the benefits, challenges, and psychological effects.
- Divide students into groups and have them communicate using different mediums (e.g., face-to-face, email, social media). Discuss how communication patterns and interpretations change based on the medium.
- Conduct a group activity where students use online tools (e.g., polls, decision-making apps) to make collective decisions. Discuss the influence of technology on group dynamics and decision-making processes.
- Organize a debate on topics such as: "Does technology shape society, or does society shape technology?" Assign students to different sides and have them present evidence to support their arguments.
- Assign students to research and present on a specific health technology (e.g., telemedicine, assistive technology, health apps). They can focus on its psychological implications and societal impact.
- In groups, students brainstorm innovative ways technology can improve education. They can present their ideas and discuss the potential psychological implications

Essential/recommended readings

- Bargh, J. A., & McKenna, K. Y. (2004). The internet and social life. *Annual Review of Psychology*, 55, 573-590.
- Carr, N. (2010). *The shallows: What the internet is doing to our brains*. W. W. Norton & Company.
- 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.
- 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.
- Rosen, L. D. (2013). *Rewired: Understanding the iGeneration and the way they learn*. Palgrave Macmillan.

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.

DISCIPLINE SPECIFIC ELECTIVE COURSE - 17: FOUNDATIONS OF NEUROPSYCHOLOGY

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 17 Foundations of Neuropsychology	4	3	1	0	Passed Class 12 th	Nil

Learning Objectives

- Develop an understanding of basic concepts of neuropsychology, including its historical developments and theories.
- Comprehensive knowledge of functions and dysfunctions of major brain regions and its impact on behaviour.
- Know basic principles of neuropsychological tests and assessments.
- Learn the principles and goals of neuropsychological rehabilitation to address cognitive impairments.

Learning Outcomes

After completing the course, the student will be able to:

- Articulate key concepts and historical milestones in neuropsychology, including the brain hypothesis and lateralization theories.
- Recognize and describe clinical symptoms associated with brain lesions, disease and their role in behaviour and cognition.
- Know the basic applications of neuropsychological assessments for cognitive and neurological evaluations.
- Conceptualise neuropsychological rehabilitation, addressing specific deficits and patient needs.

SYLLABUS OF DSE-17

UNIT 1

(8 Hours)

Understanding Neuropsychology

Neuropsychology – definition; historical antecedents of neuropsychology – the brain hypothesis, localization, Broca's and Wernicke's discovery, Disconnection syndrome hypothesis; Lateralization – right and left hemisphere.