

PSY-436 Psychology and Emerging Technologies with AI Applications (3 CHs)

Pre-requisite: None

Course Description:

This course is designed to help students explore the vibrant relationship between psychology and technology. It focuses on examining how digital tools, social media, and emerging technologies influence human behaviour, cognition, and well-being. Students will examine topics such as attention, memory, digital communication, virtual environments, and artificial intelligence through a psychological lens. Special emphasis is placed on understanding both the advantages and challenges of technology use, including its impact on mental health, identity, and social relationships. The course also introduces students to human-computer interaction and strategies for promoting digital wellness in an increasingly connected world.

Course Objectives:

Upon completion of this course, students will be able to:

1. Examine the cognitive impact of technology on attention, learning and decision-making.
2. Critically analyze the emotional and psychological consequences of technology use, especially its effects on stress, anxiety and social behavior.
3. Evaluate the influence of social media and virtual environments on identity formation, self-perception and interpersonal skills.
4. Demonstrate an understanding of the core principles of human-computer interaction and how psychological theories inform the areas of user experience (UX).
5. Demonstrate an understanding of the psychological implications of emerging technologies, especially Artificial Intelligence, Chatbots and Virtual Reality.
6. Develop strategies to manage technology usage and promote mental well-being, digital boundaries and work-life balance.

Learning Outcomes:

By the end of the course, students should be able to:

- Understand how technology influences psychological processes such as attention, memory, learning, emotion, and social behaviour.
- Evaluate the psychological principles underlying human-computer interaction (HCI) and the design of user-centric digital tools.
- Analyze the psychological impact of social media, gaming, and virtual environments on identity, relationships, and well-being.
- Apply psychological strategies to mitigate negative mental health impacts of digital technologies and promote digital well-being.

Course Content:

- Introduction
 - Introduction to Psychology & Technology
 - Overview of the course, scope, key concepts, and technology's evolution in psychological study
- Cognition and Technology I
 - Attention and memory in digital contexts
- Cognition and Technology II
 - Learning and digital devices
- Emotions and Mental Health in the Digital Age
- Social Psychology and Digital Behaviour
 - Interpersonal relationships online, cyberbullying, digital empathy
- Social Media Psychology I
 - Online identity, self-presentation, and comparison
- Social Media Psychology II
 - Social networking, influence, and addictive design.
 - Psychological Impact of a Chosen App or Platform
- Human-Computer Interaction I
 - Usability, cognitive load, and user experience (UX) principles
- Human-Computer Interaction II
 - Psychology of interface design and accessibility
- Virtual Environments and Gaming
 - Avatars, identity, immersion, and behavior
- Artificial Intelligence and the Human Mind
 - AI companions, chatbot psychology, and machine bias.
- Virtual Environments and Gaming
 - Avatars, identity, immersion, and behavior
- Digital Well-Being and Self-Regulation I
 - Screen addiction, tech fatigue, digital detoxing
- Digital Well-Being and Self-Regulation II
 - Psychological strategies to promote healthy tech use.
- Work-Life Balance and Remote Work
 - Psychological implications of digital labor and burnout.

Reference Book:

- The Wiley Handbook of Psychology, Technology, and Society. Editor(s): Larry D. Rosen, Nancy A. Cheever, L. Mark Carrier Print 9781118772027
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