



Course Syllabus

Course Code META-527	Course Title User Experience and Interactive Design	ECTS Credits 10
Prerequisites None	Department Digital Innovation	Semester Fall/Spring
Type of Course Elective	Field Metaverse	Language of Instruction English
Level of Course 2 nd Cycle	Lecturers Dr. Leonidas Katelaris and Fanos Katsaris	Year of Study 1 st
Mode of Delivery Face to face	Work Placement N/A	Corequisites N/A

Course Objectives:

The main objectives of the course are to:

1. Provide students with an in-depth and systematic view of UX and interactive design in Metaverse
2. Equip students with an understanding of the main principles, practices and challenges related to UX and interactive design in Metaverse
3. Explore and analyse UX and interactive design examples and cases
4. Equip students with the skills to design and develop UX in Metaverse

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Understand the principles and potential of Metaverse for interactive design, and the unique challenges and opportunities for UX and interactive design in the Metaverse.
2. Design user personas, user journeys, navigation systems, social features, interactions, virtual communities, and immersive experiences in the Metaverse.
3. Conduct user research and testing, incorporate user feedback into iterative design processes, and prototype and refine Metaverse designs for accessibility, performance, and interaction design.
4. Apply the knowledge, principles and methodologies learned in the course to design and develop projects on Metaverse UX and interactive design.

Course Content:

Session 1: Metaverse, UX and Interactive Design

- Metaverse and its potential for interactive design
- UX design and its role in Metaverse
- User experience and interactive design principles and methodologies
- Unique challenges and opportunities for UX and interactive design in the Metaverse

Session 2: Navigation and Customization in the Metaverse

- Principles of user experience design in Metaverse
- Developing user personas and user journeys in Metaverse
- Best practices for designing navigation systems in the Metaverse
- Designing avatars and virtual environments for customization and personalization
- User testing and feedback for navigation and customization design

Session 3: Communication and Social Interaction in the Metaverse

- Understanding social interaction and its importance in Metaverse
- Social norms and communication styles in the Metaverse
- Designing for social presence and social immersion
- Creating virtual communities and social experiences in Metaverse
- Principles and practices for designing social features and interactions
- Strategies for promoting positive social behavior and mitigating negative behavior

Session 4: Immersion and Content Design in the Metaverse

- Understanding how immersion can impact the user experience in the Metaverse
- Interaction design in immersive environments
- Conducting user research in immersive environments
- Best practices for designing immersive experiences and content
- Designing for different devices and platforms
- User testing and feedback for immersion and content design

Session 5: Accessibility and Performance in the Metaverse

- Understanding the importance of accessibility in the Metaverse
- Designing accessible Metaverse experiences
- Strategies for ensuring high performance and low latency in the Metaverse

Session 6: Interaction Design in Virtual Environments

- Interactive design practices in the Metaverse
- Designing objects and interfaces for interaction in virtual environments
- User testing and feedback for virtual environment interaction design

Session 7: Advanced Interaction Design Techniques for the Metaverse

- Exploring emerging trends and cutting-edge technologies in interactive design for the Metaverse
- Designing for mixed reality and augmented reality experiences in the Metaverse
- Strategies for integrating machine learning and AI technologies into interactive design in the Metaverse

Session 8: Metaverse Case Studies and Future Developments

- Review of case studies of successful Metaverse UX and interactive design projects
- Analysis of emerging trends and developments in the Metaverse
- Discussion of future challenges and opportunities for UX and interactive design in the Metaverse

Session 9: User Research and Testing in the Metaverse

- Best practices for conducting user research and testing in the Metaverse
- Strategies for gathering and analyzing user feedback in the Metaverse
- Incorporating user feedback into iterative design processes in the Metaverse

Session 10: Prototyping and Iterative Design in the Metaverse

- Prototyping and iterative design in the Metaverse
- Strategies for designing and refining Metaverse experiences based on user feedback
- Tools and techniques for prototyping and testing Metaverse designs

Session 11: Collaborative Design and Development in the Metaverse

- Methods and practices for collaborating on Metaverse design and development projects
- Strategies for managing distributed teams and remote collaboration in the Metaverse
- Tools and technologies for collaborative design and development in the Metaverse

Session 12: Final Project and Presentation

- Students will apply the principles and methodologies learned in the course to design and present their own Metaverse UX and interactive design project
- Peer review and feedback on final projects
- Wrap-up and discussion of the future of UX and interactive design in the Metaverse

Learning Activities and Teaching Methods:

- Faculty Lectures
- Guest-Lectures Seminars
- Directed and Background Reading
- Case Study Analysis
- Simulations
- Student-led Presentations
- In-Class Exercises

Assessment Methods:

- Interactive activities and classroom participation
- Project
- Final exams

Assessment Methods in alignment with Intended Learning Outcomes:

Assessment Method	Weighting	Intended Learning Outcomes to be assessed			
		LO1	LO2	LO3	LO4
Interactive activities	15%	✓	✓	✓	
Project	25%	✓	✓	✓	✓
Exams	60%	✓	✓	✓	

Student Study Effort Expected:

Student Study Effort Expected	Hours
Lectures	12h
Project	80h
Interactive activities and forum participation	15h
Reading and research	140h
Exam	3h
Total	250h

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
97 Things Every UX Practitioner Should Know	Dan Berlin	O'Reilly	2021	978-1492085171

Recommended Textbooks / Readings:

- Bartle, R. A. (2004). Designing Virtual Worlds. New Riders. ISBN: 978-0131018167
- Delgado B. (2022). User experience (UX) in Metaverse: realities and challenges. Metaverse Basic and Applied Research, 1, 9. Available at https://www.researchgate.net/publication/366668118_User_experience_UX_in_metaverse_realities_and_challenges/fulltext/63b17da1a03100368a45c0cb/User-experience-UX-in-metaverse-realities-and-challenges.pdf

- Jerald, J. (2015). The VR Book: Human-Centered Design for Virtual Reality. ACM Book. ISBN: 978-1970001129
- Yablonski, J. (2020). Laws of UX. O'Reilly. ISBN: 978-1492055310
- Szabo, P. W. (2017). User Experience Mapping: Enhance UX with User Story Map, Journey Map and Diagrams. Packt Publishing. ISBN: 978-1787123502
- Truog, D. (2022). Ten Principles For Designing The Metaverse. Forrester. Available at <https://www.forrester.com/blogs/designing-the-Metaverse/>
- Yayici, E. (2022). Web3 UX Design Mentor Book. UX Services.