

Course Title	Learning in Medicine: Infrastructure and Technologies				
Course Code	MDE620				
Course Type	Compulsory				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	1 <sup>st</sup> year / 1 <sup>st</sup> semester				
Teacher's Name	TBA				
ECTS	10	Lectures / week	Up to 6 Teleconferences	Labs / week	N/A
Course Purpose and Objectives	<p>The course aims at the development of students' deep understanding of the use of technologies and learning spaces in medical education. Medical education is rapidly changing, influenced by many factors including the changing health care environment, the changing role of the physician, altered societal expectations, rapidly changing medical science, and the diversity of pedagogical techniques. Changes in societal expectations put patient safety in the forefront and raises the ethical issues of learning interactions and procedures on live patients, with the long-standing teaching method of "see one, do one, teach one" considered as no longer acceptable. The educational goals of using technology in medical education include facilitating basic knowledge acquisition, improving decision making, enhancement of perceptual variation, improving skill coordination, practicing for rare or critical events, learning team training, and improving psychomotor skills. Different technologies can address these goals. The students will develop the critical ability to flexibly use the spaces and the technologies to enhance student learning.</p> <p>In addition, the course aims at sensitizing potential educators in the critical analysis and effective understanding of the potential of existing learning spaces and provide guidance on how physical learning spaces are aligned with the curriculum. It will also initiate the concept of e spaces as learning environments and will enable students to effectively use these spaces as learning environments</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Effectively use computer assisted learning (CAL) as a tool to enhance student experience</li> <li>• Analyze the limitations of Personal Digital Assistants (PDA) such as medical apps</li> <li>• Incorporate the PDAs in the creation of a course</li> </ul>				

	<ul style="list-style-type: none"> <li>• Use Digital games in their teaching</li> <li>• Discuss the use of the task trainers</li> <li>• Critically analyze and effectively design complex simulation for their teaching</li> <li>• Describe the potential of wearable technologies such as Google glass and be able to criticize their future and potential use in Medical Education</li> <li>• Describe the limitations of their learning spaces and propose ways of improvement</li> <li>• Analyze and discuss the use of e spaces in the delivery of the medical curriculum</li> </ul>		
Prerequisites	None	Co-requisites	None
Course Content	<p>Effective use and design of CALs</p> <p>Effective use and limitations of PDAs</p> <p>Use of Digital or “Serious games” in the delivery of curriculum</p> <p>Use of task trainers (simple or virtual) for the acquisition of skills</p> <p>Creation and effective delivery of complex simulation scenarios in Medical Education</p> <p>Definition of a dynamic learning space</p> <p>Definition and limitations of e spaces</p>		
Teaching Methodology	E-Learning		
Bibliography	<p>Oblinger DG (2006). Learning Spaces. EDUCAUSE ISBN 0-9672853-8-0</p> <p>Nestel D, Kelly M, Jolly B &amp; Watson M (2018). Healthcare Simulation Education: Evidence, Theory and Practice 1st Edition. Wiley Blackwell</p> <p>Crawford SB, Baily LW &amp; Monks SM (2019). Comprehensive Healthcare Simulation: Operations, Technology, and Innovative Practice 1st ed</p> <p>Fallavollita P (2017). Innovative Technologies for Medical Education DOI: 10.5772/intechopen.68775</p> <p>Kurc AR, Roszac M, Mokwa-Tarnowska I, Kolowska-Gawiejnowicz M, Zych J &amp; Kowaleski W (2018). E-Textbook Technologies for Academics in Medical Education. Available at <a href="https://content.sciendo.com/view/journals/slgr/56/1/article-p161.xml">https://content.sciendo.com/view/journals/slgr/56/1/article-p161.xml</a></p>		

Assessment	<table border="1"><tr><td>Assignments/Ongoing Evaluation</td><td>50%</td></tr><tr><td>Final Examination</td><td>50%</td></tr><tr><td>Total</td><td>100%</td></tr></table>	Assignments/Ongoing Evaluation	50%	Final Examination	50%	Total	100%
Assignments/Ongoing Evaluation	50%						
Final Examination	50%						
Total	100%						
Language	English						