Course 2QA327- Schedule HT2026.

Week 36	**Topic**
Zoom Lecture	**Course Introduction**
Tuesday 1st 16:00-17:00	Introduction to course syllabus, activities, faculty and different moments
Fernando Seoane and Eduardo Illueca	

Module 1: Introduction to Healthcare Transformation (Weeks 36 - 37)	
Week 36 available 31st	**Factors driving Transformation of Healthcare Offline - Self-study- Content on Web**
Contents	*Patient Centredness and Patient Engagement, Evidence-Based Medicine, Patient safety*
Week 36 available 2nd September, Wednesday	**Video Lecture on High-Value Care and Outcome Measures**
Contents	*High-Value Care, PROMs & PREMs, Integrated care*
Week 36 available September, 4th Friday	**Video Lecture of Digital Health Transformation: a holistic process**
Contents	DHT vs Digitalization, What is DHT? and requirements to achieve it
Week 37	**Individual student work – Own reflexion on DHT potential and hinders**
Contents	Activity to check in own progress and possibility to get bonus points. (Deadline 13th of September)
End of Module 1	

Module 2: Digitalization of Healthcare (Weeks 37 - 38)	
Week 37 available September, 7th Monday	**Video Lecture in Interoperability in Digital Healthcare**
Contents	*Definitions, challenges in healthcare, influencing factors & solutions*
Week 37 available September, 10th Thursday	**Video Lecture- Health Data and Health Data Management**
Contents	*Sources, Usage, Access, examples from Hospital centers*
Week 38 Available September, 14th Monday	**Video Lecture in Security, Privacy and GDPR**
Contents	*Legal Framework, requirements, risks and trends*
Week 38 Available September, 17th Thursday	**Ethics in Digital Health Self-study- Content on Web**
Contents	Group Activity. Impact of digitalization on ethical principles in Healthcare
Activity	Group discussion about benefits and risk of digitalization in Healthcare (Deadline 3rd of October)
End of Module 2	

Module 3: Tools and Methods (Weeks 39 - 42)	
Week 39 Available September 21st, Monday	**Video Lecture in Lean and Six-sigma in healthcare**
Content	*What is Lean-Six Sigma, application in Healthcare settings, showcasing.*
Week 39 Available September, 24th, Thursday	**Video Lecture in Business Intelligence in Healthcare**
Contents	*What is Business Intelligence, BI in Hospitals*
Week 40 Available September 28th, Monday	**Video Lecture in AI and Machine Learning in Healthcare.**
Contents	*Introduction to AI, ML process, types, examples in healthcare and step-by-step case demonstration*
Week 40 Available October 1st Thursday	**Video Demonstration – Application of Machine Learning.**
Week 41 Available October 5th Monday	**Video Lecture on Process-oriented Data Science.**
Contents	*Introduction, Interactive process Mining Methodology, cases.*
Week 41 Available October 7th, Wednesday	**Video Demonstration – Application of Process mining**
Week 41 Available October 8th Thursday	**Video Lecture on Data Visualization and Dashboarding**
Contents	*Sources, potential uses, examples*
Week 42	**Self Assessment of Module 3**
Contents	Activity to check in own progress and possibility to get bonus points
Activity	Individual Quiz (Deadline 18th of October)
End of Module 3	

Module 4: Medical Technologies (W42-W45)	
Week 42 Available October 12th, Monday	**Video Lecture in Real-Time Locations Systems.**
Contents	*What is? Technologies, solutions and services. Real installations Walkthrough.*
Week 42 Available October 15th, Thursday	**Video Lecture Telemedicine, eHealth and mHealth.**
Content	*Enabling Digital and IT technologies. What is what, communalities, differences and examples*
Week 43 Available October 19th, Monday	**Video Lecture on Wearable technologies and consumer level health device.**
Content	Wearable sensing foundations, personal health devices, lifestyle and wellbeing solutions.
Week 43 Available October 22nd, Thursday	**Video Digital Lecture on Regulatory framework of medical technology and digital health.**
Content	*Applicable regulations, Software as a Medical Device, AI Act, European Health Data Space, EU vs US*
Assessment	Group work on all-through course assignment. Activity to check in own progress and possibility to get bonus points (Deadline 8th of November)
End of Module 4	

Course Examination	
Week 45 November 8th	Delivery of presentations of student group work for bonus points
Week 45 November 2nd - 6th (2 hour)	**Canvas Course Examination** Quiz Multiple Answer type + Essay own reflection question
Week 51 December 14th - 18th (2 hour)	**Canvas Course Re-examination,** Quiz Multiple Answer type + Essay own reflection question