

698C Health, Education and Innovative Technology (HealthEdIT)

This is not a clinical rotation

Course Name Health, Education, and Innovative Technology

Course Director Warren Wiechmann, MD, MBA

Course Director Julie Youm, PhD

Academic Year 2020-2021

1. Course Director, Coordinator and General Administrative Information

FACULTY AND STAFF

Name	Office Location	Phone	Email
Director: Warren Wiechmann, MD, MBA	836 Health Sciences Rd	949-824-3837	wiechmaw@uci.edu
Co-Director: Julie Youm, PhD	836 Health Sciences Rd	949-824-3913	jyoum@uci.edu

DESCRIPTION

This elective is designed for students to review the latest trends in technology through tailored web and article searches, curate articles based on areas of interest, complete an instructional technology and design thinking project in their area of clinical interest.

PREREQUISITES

This course is intended for third- or fourth-year students enrolled in the undergraduate medical education program at University of California, Irvine School of Medicine (UCISOM).

RESTRICTIONS

This course is intended for third- or fourth-year students enrolled in the undergraduate medical education program at University of California, Irvine School of Medicine (UCISOM).

COURSE DIRECTOR

Warren Wiechmann, MD, MBA is the Associate Dean of Clinical Science Education and Educational Technology at UCISOM, Professor of Emergency Medicine, and the

project leader for the school's iMedEd Initiative (www.imeded.uci.edu), a comprehensive digital overhaul of the curriculum which uses the iPad as its centerpiece for curricular innovation. He is interested in the mash-up of technology, medicine, and education. He is also intrigued by the integration of technology to improve clinical workflows and efficiency, instructional technology and information design to enhance physician and patient education, mobile and asynchronous learning, the development of a medical student curriculum in informatics and instructional technology, digital literacy, and mHealth/eHealth/Medicine 2.0/Health 2.0.

Julie Youm, PhD, is the Assistant Dean, Education Compliance and Quality, and the Director, Educational Technology at UCISOM. Her background is in instructional design and cognitive studies. She works with faculty and students to explore and assess the integration of technology in the medical school curriculum and her research interests include mobile technologies, digital/blended learning and systems thinking.

INFORMATION FOR THE FIRST DAY

Who to Report to on First Day: Warren Wiechmann, MD, MBA or Julie Youm, PhD.

Location to Report on First Day: Email jyoum@uci.edu at least one week prior to the start of the rotation to receive access to course materials.

SITE: Medical Education Building, Irvine, UCISOM

DURATION: 2 or 4 weeks

Scheduling Coordinator: UC Irvine students please call (714) 456-8462 to make a scheduling appointment.

Periods Available: The time of the course must be pre-approved by the elective director at least 3 months prior to the start of the course. No exceptions.

NUMBER OF STUDENTS ALLOWED: 4 per rotation

WHAT STUDENTS SHOULD DO TO PREPARE FOR THE COURSE

Students must have a willingness to author content (articles, social media, podcasts) on the internet to wide, public audience and a willingness to incorporate technology into their clinical and educational practices.

COMMUNICATION WITH FACULTY

All questions about the course should be directed to the Course Directors. Contact information and office location are at the beginning of this document.

The Course Directors are also available to meet in person. Please email jyoum@uci.edu to arrange an appointment. To ensure that your email will not be lost in the large volume of email received, please use the following convention for the subject line:

SUBJECT: COURSE NAME, your last name, your issue (e.g. XXX, Smith, Request for appointment)

2. Course Objectives and Program Objective Mapping

The following are the learning objectives for the HealthEdIT course. Students are expected to demonstrate proficiency in these areas in order to satisfactorily complete the course. In addition, the extent of a student's mastery of these objectives will help guide the course evaluation and grade.

Course Objective	Mapped UCI School of Medicine Program Objective	Sub Competency	Core Competency
Understand the role that technology plays in advancing the practice of medicine and education	D-1. A commitment to lifelong learning and independently seeking new knowledge and skills in their own recognized areas of learning deficit	Lifelong Learning	Dutiful
Become familiar with Web 2.0 tools that lay a large role in patient-centered and patient-authored health networks	D-1. A commitment to lifelong learning and independently seeking new knowledge and skills in their own recognized areas of learning deficit	Lifelong Learning	Dutiful
Apply design thinking to address a healthcare problem	D-2. A commitment to patient care and to the well-being of patients and colleagues	Patient Care	Dutiful
Demonstrate knowledge of the concepts of HIPAA, data security, and health records to allow them to use technology to practice medicine safely	C-1. Honesty and integrity reflecting the standards of the profession, in interacting with colleagues, patients,	Professionalism	Altruistic

	families and professional organizations		
Demonstrate knowledge of the role of technology in patient care environments and use best practices to strengthen the patient-doctor relationship	A-5. Knowledge of medical practice, including healthcare economics and health systems impacting delivery and quality of patient care	Medical Practice	Knowledgeable
	B-6. The ability to function effectively within the context of complexity and uncertainty in medical care	Patient Management	Skillful
Author educational content for patients, colleagues, and students using Web 2.0 tools	D-1. A commitment to lifelong learning and independently seeking new knowledge and skills in their own recognized areas of learning deficit	Lifelong Learning	Dutiful
Evaluate and assess existing Web 2.0 tools and online medical resources for credibility and content validity	B-4. The ability to search the medical literature, including electronic databases, and to locate and interpret up-to-date evidence to optimize patient care	Evidence-Based Medicine	Skillful
Become nimble in using technology to improve research and authoring workflows	D-1. A commitment to lifelong learning and independently seeking new knowledge and skills in their own recognized areas of learning deficit	Lifelong Learning	Dutiful

3. Course Resources

TEXTS AND READINGS: SUGGESTED

Creative Destruction of Medicine by Eric Topol

TEXTS AND READINGS: SUPPORTING AND REVIEW

- Social Media in Clinical Practice by Bertalan Mesko
- Socialnomics: How Social Media Transforms the Way We Live and Do Business
- Blog sites: 33 charts.com, kevinmd.com, iMedicalapps.com, mobihealthnews.com
- <https://dschool.stanford.edu/resources/dschool-reading-list>

4. Major Exams, Assignments and Grading

MANDATORY SESSIONS

This course includes the following mandatory sessions:

Session Title	Location
Project proposal approval	Videoconference
3D printing experience	UCISOM Makerspace, Medical Education Building

MAJOR ASSIGNMENTS AND EXAMS

Students must submit the following mandatory assignments:

- Project proposal
- HealthEdIT blog posts
- Final technology project and reflection
- Innovative use of 3D printing example
- Design thinking challenge

THE GRADING SCALE

Medical Students are graded using the following scale: Honors (H), Pass (P), Fail (F), and Incomplete (I). For further information, please review the Grading Policy.

A course director will mentor students to provide feedback on their project and other course requirements. Students who do not meet these criteria will be given the option of doing additional written work that will be determined by the instructor, or the student may choose to repeat the entire elective.

The student's final grade will be submitted on the standard UC Irvine elective form. Students have 30 days from the date of the grade to appeal any aspect of this grade. Please contact your Clerkship/course Director should you have any questions.

Requirements for "Pass": To receive a grade of Pass, students must demonstrate successful performance in all the following areas:

- Submit and receive Course Director approval for a technology project proposal
- Curate and post content daily to the course blog site
- Complete a 3D printing experience
- Complete a technology project to improve basic or clinical science education or patient care

Requirements for "Honors": To receive a grade of Honors, students must demonstrate exceptional performance in the range of the top 15% for the course.

Grounds for "Incomplete": You will not be issued a grade until all elements of the course have been completed.

Grounds for "Fail": You will receive a grade of "Fail" if the requirements for passing the course have not been met. Please refer to the [Grading Policy](#) for the impact of the "Fail" grade to the transcript.

REMEDIATION

Remediation, if needed will be designed by the Course Director to suit the issue at hand.