

# Fall 2024 – Improving Health Care

**PPD 508 - ISE 508**

**Health Care Operations Improvement (4 units)**

**Wednesdays, 6:40-9:40 PM**

Healthcare is changing dramatically and quickly. The pandemic added to the industry's importance and challenges. The world's largest industry and largest employer seeks people to solve its unique problems. Emergencies, high costs, and new treatments demand better systems. This course offers a student the opportunity to learn the latest improvement tools from experts, developers, and researchers in the field. Systems design, data analytics, new services, and technology are changing how hospitals and clinics care for people.

Topics in quality improvement, better teamwork, scheduling, Lean thinking, staffing, technology assessment, informatics, and optimization are covered. With models and simulation, new healthcare system designs can be created. AI, big data, and biotech are rapidly changing the medical world. Implementing information systems, telemedicine, and new technology are addressed in this course.

## **Course Description:**

The highly rated course has been redesigned and covers topics in performance improvement to reduce wait time, improve quality, and implement changes. Students will become familiar with methods and resources for identifying problems and implementing change in a healthcare setting by seeing how it helps people in need.

In addition to lectures, we will have frequent guest speakers providing insights. Past speakers have included hospital CEO's, IT providers, software developers, systems engineers, technology developers, physicians, and government representatives. Organizations such as Kaiser, Cedars Sinai, the Veteran's Administration, Keck Hospitals, and Epic software will speak at the class.

Optional projects at local hospitals will be provided to students, and many employment opportunities have resulted directly from this course. We will use the USC hybrid capabilities of the classroom to give an equal experience to online and in-person students.

## **Pre-requisites:**

This course is open to all USC students with graduate or upper-division undergraduate standing. Prior experience in health care is not required – but interest is.

Register for ISE or PPD 508, or for more information, please contact  
David Belson, Ph.D. [belson@usc.edu](mailto:belson@usc.edu)

