

HSD 410/510

Device Design in the Health Sciences

T/Th 1pm – 3pm @ HSIB 605

Instructor: Dr. Travis W. Sawyer | tsawyer9226@email.arizona.edu

Developing Tools for Healthcare Solutions using Design Thinking

Learn to apply the design thinking process – **Notice, Empathize, Define, Ideate, Prototype, Test, and Reflect** – to understand and clearly define real needs, explore design options & concepts, prototype your design, develop and pitch your design recommendation and implementation plan.

In this course, you will work in an interdisciplinary team with your peers to gain hands-on experience developing devices for application in the health sciences. In addition to development, you will learn about commercialization in the medical field, including exposure to business plans, intellectual property, regulatory pathways, and reimbursement. Following this course, you will be able to apply the steps in the design thinking process to identify medical needs, design devices, and implement solutions.

Course Characteristics

- Curated for junior/senior undergrad and grad students
- Interdisciplinary – non-major-specific
- Hands-on and project-driven
- Course project integrable with your current research
- Delivered in a makerspace learning environment
- Dedicated hours for collaborative teamwork