ENME371 Junior Design: aimed at teaching and intro-ing the tools of Product Development Process (PDP)
ENME472 Capstone Design: implementing a PDP

In these classes lecture design examples are often utilized to emphasize the PDP tools and insights, and design scenarios are chosen for exercises. In these courses the modifications were to simply replace existing design examples with socially relevant design examples. The PDP content value is unchanged but the students are reminded of the potential for socially relevant design. These design examples are also antidotally more engaging and help to notify the students of student + faculty work in the field.

Examples:
Lecture exercise: Identify the “Physics of the Task” calculations and background info that a team might collect related to: Therapy swing device for a grown teenager with autism.

Take home exercise: Create a functional breakdown for a toilet transfer device for an elderly wheelchair user and her daughter to use when out of the house.

Lecture example: Providing examples of necessary and valuable low-fidelity early concept testing for a powered therapy swing.