1. Course number and name: BMED 1000 Design Your Biomedical Engineering Degree
2. Credits and contact hours: (1-0-0-1)
3. Prepared by: Todd Fernandez and Cristi Bell-Huff
4. Textbook: Design Your Life by Bill Burnett and Dave Evans
5. Specific course information
   a. Catalog description: Design Your Biomedical Engineering Degree is an introduction to the field of biomedical engineering, with an emphasis on career preparation.
   b. Prerequisites or co-requisites: None
   c. Required
6. Specific goals for the course
   a. Tackle a complex, real-world problem (Student Outcome 7)
      i. Define the problem and identify the problem goals
      ii. Explore the problem statement to identify critical problem features
      iii. Develop provisional models and hypotheses that frame problem-solving
      iv. Plan an attack strategy, carry it out, and evaluate the results
   b. Conduct self-directed inquiry (Student Outcome 7)
      i. Recognize inadequacies of existing knowledge, identify learning needs, set specific learning objective, and make a plan to address these objectives
      ii. Evaluate inquiry, assess reliability of sources, digest findings and communicate them effectively to self and others
      iii. Apply the newly acquired knowledge to the problem
   c. Demonstrate effective group skills (Student Outcome 4)
      i. Help group develop team skills, and willingly forego personal goals for group goals
      ii. Complete tasks on time, and avoid contributing excessive or irrelevant information
      iii. Express disappointment or disagreement directly, give emotional support to others, demonstrate enthusiasm and involvement
      iv. Monitor group progress, facilitate interaction with other members, and assess group skills of self and others
7. Brief list of topics to be covered
   1. Team formation, peer- and self-evaluation of team work
   2. Design thinking – using empathy and tools for understanding users to engineer better products
   3. Development of individual entrepreneurial mindset – to encourage students to exercise curiosity, encourage connections, and appreciate the diverse ways of creating value
   4. Planning students’ experience in BMED – begin a portfolio that represents students’ capacity as budding biomechanical engineers