Year 1 Experience of a Course Redesign

J. Chris Bouwmeester, PhD PEng, University of Toronto, Institute of Biomaterials and Biomedical Engineering; www.biodesigncapstone.com

Test

Q: Does the course change attitudes towards biomedical engineering?

A: Adapted the Biology Attitude Scale¹ by changing the word "biology" to "biomedical engineering"

Preliminary Results: 180 invited to survey. 53 and 24 responses to preand post-survey, respectively. 10 individuals completed both.

Q: Does this course increase the number of students engaging with biomedical engineering activities?

A: Track the number of students who select the Biomedical Systems **Engineering Major**

Will Active Learning Encourage more Students to Choose



Biomedical Engineering?



Anatomy, Physiology, & Medical Devices



Yorick, The Bionic Skeleton²

2018-

Build Content Structure Style

Oct: Modified calendar description for 2020

Nov: Selected online textbook

Jan: Created collaborative learning activities & operated in the active learning auditorium

> 2019

Dec: Created semi-flipped lectures

May: Preliminary results

Think

How can I describe the characteristics of the course in measurable ' terms? Constructivist & constructionist theories

Student requirements



Course specifications

Myhal Centre: Lee and Margaret Lau Auditorium



Aug: Selected all new content and adapted to first iteration of course - ongoing