

Course: BIOT 505

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Brief course description:

Biotechnology continues to dominate many aspects of our lives. We depend on biotechnology to feed, heal and power our world. Advances in biologic, biophysical and robotics tools have opened possibilities that are only limited by our imaginations. Stem cell biology, whole genome sequencing, extreme high-throughput drug screening, nanotechnology and CRISPR genome editing are the new tools of biotechnology that will transform our food, medicine and energy products. When combined with equally disruptive advances in mass-data analyses, computer power, imaging techniques, robotics and artificial intelligence, new technologic sciences are surly to rise and develop. The BIOT 505 lectures will attempt to capture some aspects of the new world of biotechnology.

Method of Delivery:

A mixture of 13 recorded and live Zoom lectures. The lecturers are from the Faculties of Science, Agriculture and Medicine.

Evaluation Scheme:

80% Weekly Quizzes (based on each individual lecture)

20% Two-page essay with references describing an inventive bio-product based on one or more of the lecture materials (Dec 4)