SISP 1107
Amazing innovations in biotechnology

Course Description

Biotechnology is a set of techniques by which human beings modify living things or use them as tools. The field of biotechnology is constantly advancing to help improve our world. The course is designed to be a blended-learning course aiming to provide an interactive as well as a creative environment for knowledge delivery. Course activities include lectures and case studies. At the end of the course, students are expected to appreciate the importance as well as the ethical issues associated with biotechnology.

Topics

1. Introduction to biotechnology
2. Uses of biotechnology
3. Case study: genetically-modified maize
4. Case study: certified cultured beef
5. Case study: edible vaccines
6. Everyday uses of biotechnology
7. Ethical issues of biotechnology

Grading Scheme

- In-class participation (15%)
- Quiz (85%)

[Topics and grading schemes are subject to change as deemed appropriate. Students will receive information and guidelines in class on how they will be assessed for the course.]

Instructor

Dr. Helen CHEUNG

Dr. Helen Cheung received her BSc (Applied Biology) and PhD (Pharmacology of cholinergic receptors in Periplaneta Americana) from the University of East London and Oxford Brookes University respectively. She has worked as a post-doctoral fellow at Fisons Pharmaceuticals in New York, USA investigating the mechanism of epileptic drugs. She began her teaching career in 1996 at the International Medical University, Malaysia. She has started teaching at HKUST since 2002. She mainly teaches biotechnology, biochemistry and nature of life. She has been intensively involved in the development of blended-learning in the Division of Life Sciences.