

BTEC 5210

BTEC 5210: Principles and Applications in Biotechnology
 Time: Saturday (9:00 am - 1:20 pm; 2:30 pm – 6:50 pm)
 Venue: Room 4502 (Lift 25-26)

Coverage: The goal of this course is to provide an interdisciplinary, state-of-the-art introduction to biotechnology. Topics include the molecular foundations of biotechnology, molecular microbiology, biotech process development and scale-up, product approval and regulatory affairs, genomics, microarray analysis, proteomics, computational biology, molecular modeling, and analytical biotechnology.

Intended Learning Outcomes:

- Process factual knowledge comprehensively across the principal areas of biotechnology
- Explain information related to the principles of cutting-edge biotechnology
- Evaluate information and data derived from experimental models in biotechnological applications
- Apply functional knowledge to research methodology of biotechnology
- Gain awareness of complexity of issues facing biotechnology and types of contributions that can be offered to society

Format of Evaluation: A take-home examination which constitutes essay-type questions. Each student works on three assignments, with each related to specialized area of biotechnological applications, which require students to evaluate and integrate the latest literature in the area of biotechnology.

Coordinator:	Prof. Raymond SC Wong	bcrayw@ust.hk
Instructors:	Prof. Kenny K Chung	bckchung@ust.hk
	Prof. Randy YC Poon	rycpoon@ust.hk
	Prof. Robert Z Qi	qirz@ust.hk
	Prof. Zhenguo Wu	bczgwu@ust.hk

Week	Date	Topic	Instructor
1	11-06-2016	Protein Kinase and Human Diseases	Wu
2	18-06-2016	Animal and Medicinal Biotechnology	Chung
3	25-06-2016	Genomics and Proteomics	Qi
4	02-07-2016	Plant Biotechnology	Wong
5	09-07-2016	Novel Molecular and Cellular Biology Techniques	Poon

Morning session:

09:00 – 10:30 Lecture
 10:30 – 11:00 Break
 11:00 – 12:30 Lecture
 12:30 – 13:20 Tutorial

Afternoon session:

14:30 – 16:00 Lecture
 16:00 – 16:30 Break
 16:30 – 18:00 Lecture
 18:00 – 18:50 Tutorial

Instructor may rearrange the above time schedule up to teaching requirement.