

Course Title/Code:	Recent Advances in Biomedical Technology (MMPH6149)
Department:	School of Biomedical Sciences
Course teachers:	Dr Cheng-han Yu (coordinator), Dr Ralf Jauch, Dr Keda Zhou, and Dr Asif Javed
Objective:	The objective of this course is to strengthen the analysis, communication and debate skills in complex contemporary topics of biomedical research.
Content:	<p>Four research topics will be introduced, including advanced microscopy, cell adhesion, chemoproteomics, cellular reprogramming, and computational genomics. In each topic, there will be one lecture followed by two presentations of related journal papers.</p> <p>Week 1: Introduction and arrangement of student presentations Week 2: Lecture of research topic #1: Cell-matrix adhesion Week 3: Lecture of research topic #2: Programming cellular states with engineered proteins Week 4: Lecture of research topic #3: Chemoproteomics and drug development Week 5: Lecture of research topic #4: Computational Genomics Week 6: Journal club of research topic #1.1 Week 7: Journal club of research topic #1.2 Week 8: Journal club of research topic #2.1 Week 9: Journal club of research topic #2.2 Week 10: Journal club of research topic #3.1 Week 11: Journal club of research topic #3.2 Week 12: Journal club of research topic #4.1 Week 13: Journal club of research topic #4.2</p>
Learning outcomes:	<p>Upon completion of the course, students should be able to:</p> <ul style="list-style-type: none"> • Analyze and review the biomedical literature relating to recent advances in biomedical technology. • Report and debate contentious issues surrounding recent advances in biomedical technology. • Critique and evaluate the advantages and disadvantages of particular approaches related to advances in biomedical technology.
Prerequisite:	None
Duration:	Offer in the second semester. Two hours every week.

**Assessment and
Examination:**

Continuous assessment:

Group presentation 30%; Group discussion contribution 40%

Examination:

Final term paper 30%

**Examination method
and duration:**

Final term paper/ take-home paper

Remarks:

Also offered to RPg from other Faculties in HKU