

Please provide a one-page brief write-up of no more than 500 words and a short video. During the project period, a list of videos relating to the introductory and background knowledge of the topics in CMBI4001 Protein Trafficking were recorded by Prof. Jiang.

As the Centre for eLearning Innovation and Technology (ELITE) has recently been established in CUHK to provide advanced support for video recording, we decided to use the Self-recording Studio of ELITE to create the online lecture videos.

We have developed seven micro-modules on introductory and background topics in protein trafficking. They are:

1. Basic Concept of Protein Trafficking
2. The Secretory Pathway
3. Protein Degradation System
4. COPII Vesicles
5. mRNA Sorting
6. Autophagosome
7. EXPO & EMP

The seven videos produced for each of the micro-modules have been uploaded to our website for students to view before classes. Each of the video is complemented with a set of multiple choice, true or false and discussion questions. The questions are also uploaded to the website. These served as quizzes which students are required to complete after watching the videos. In conclusion, we have completed the project satisfactorily.

From September to December, in the course CMBI4001 Protein Trafficking and BIOL2120 Cell Biology, students were required by Professors to watch the online videos in the Micro- modules before lessons. Questions regarding the content of online videos were discussed at the beginning of each class. Follow-up explanations and discussions using 1-2 related papers recently published in top-ranked international journals were achieved in classes.

We have performed two sets of surveys in the first and last lesson of the two courses (CMBI4001 and BIOL2120) respectively to identify students' potential learning problems and to determine whether the problems have been solved by our micro-modules. The evaluation result shows that our micro-modules are successful in achieving the pedagogical goal.

All online lectures, quizzes and answers are uploaded to the website. The link is:
<http://www.cuhk.edu.hk/centre/ccdb/micro-modules>