



E3BTE002C

(Token- required)

Biotechnology Course (Level III): Trends in Modern Biotechnology II

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Application Deadline
29 May 2023 12:00 noon

Intended Learning Outcomes

Result Release
9 Jun 2023

Upon completion of the programme, participants should be able to:

1. describe the basic knowledge of modern biotechnology and its trends nowadays, e.g. genetic engineering;
2. recognize the latest techniques in modern biotechnology;
3. explain the concepts of practical experiments of molecular biology and recombinant DNA technology;
4. perform experiments of genetic engineering, e.g. DNA microarray, genetically modified organisms detection by PCR;
5. discuss the ethical and moral issues of stem cell therapy.



◆ Introduction

In this course, we will have an in-depth study on the latest trends in modern biotechnology – from the fundamental knowledge of molecular biology to recombinant DNA technology and genetic engineering. Furthermore, some new techniques in modern biotechnology (e.g. polymerase chain reactions (PCR), DNA microarray, animal cloning and stem cell therapy) will also be discussed. Besides, hands-on experiments are designed to demonstrate the techniques in genetic engineering (e.g. genetically modified organisms detection by PCR). Finally, topics such as ethical issues of modern biotechnology applications, pros and cons of stem cell therapy, etc. will be explored and discussed.

This programme is co-organised with SKH Bishop Baker Secondary School.

◆ Schedule

Session	Date	Time	Venue *
1	11 Aug	9:00 a.m. – 12:00 noon	Classroom 406
2	12 Aug		Classroom 406
3	16 Aug		Biology Laboratory
4	18 Aug		Classroom 406
5	19 Aug		Biology Laboratory
6	26 Aug		Biology Laboratory

*Address: SKH Bishop Baker Secondary School, 10 Fung Yau Street South, Yuen Long, N.T. ([MAP](#))

◆ Target Participants

- S3 to S6 HKAGE student members
- Class size: 30

Priority will be given to students who have completed “Biotechnology Course (Level III): Trends in Modern Biotechnology I (E3BTE001C)”.

◆ Pre-requisite

- Students with primary interest on biology, chemistry and biotechnology;
- Biology and chemistry knowledge of S3 or above level is preferred.

◆ Medium of Instruction

English with English Handouts

◆ Screening

Please answer the screening questions in the online application form.

*The screening questions are designed to help the applicant understand the course level and the course content. The questions must be answered by the student applicant and it can only be attempted once. The answers cannot be changed once the application is submitted. Selection is based on students' performance in answering the questions. Only students who can demonstrate motivation and knowledge of biotechnology in the screening questions can be enrolled in the programme.

◆ Certificate

E-Certificate will be awarded to participants who have:

- attended at least 5 sessions; and
- completed all the assignments with satisfactory performance.