

## **Course Syllabus**

**MBMG 601**

**Academic year 2021**

**Course ID and Name:** MBMG601: Current Topics in Molecular Biology

**Course coordinator:** Asst. Prof. Dr.Duangrudee Tanramluk

**Instructors:**

1. Professor Dr.Duncan Smith
2. Associate Professor Dr.Apinunt Udomkit
3. Associate Professor Dr.Chartchai Krittanai
4. Associate Professor Dr.Panadda Boonserm
5. Associate Professor Dr.Chalermporn Ongvarrasopone
6. Associate Professor Dr.Sarin Chimnaronk
7. Assistant Professor Dr.Duangrudee Tanramluk
8. Assistant Professor Dr.Chalongrat Noree
9. Dr. Poochit Nonejuie

**Credits:** 1

**Curriculum:** Master of Science Program in Molecular Genetics and Genetic Engineering  
(required course)

Doctor of Philosophy Program in Molecular Genetics and Genetic  
Engineering (required course for students from B.Sc.)

**Teaching methods:** Online

**Semester offering:** First semester

**Pre-requisites:** None

**Expected learning outcomes:**

After finishing the course, students should be able to:

- 1) Demonstrate academic honesty and responsibility
- 2) Analyze scientific literature based on molecular biology principles and theories
- 3) Summarize scientific literature in an interactive manner

**Alignment of teaching and assessment methods to course learning outcome:**

Course learning outcome	Teaching method	Assessment methods
1. Be responsible in conducting the given assignments with honesty and work effectively as part of a team or class	(1) Lecture (2) Case studies with learned experience (3) Group assignment and presentation (4) Emphasis on scientific integrity and misconduct	(1) Reports and assignment quality (2) Presentations (3) In-class behavior and class attendance (4) Scores are deducted if the assignments are late or found copied from others (5) Give bonus points for each student who lead the weekly discussion in class
2. Analyze scientific literature based on molecular biology principles and theories	(1) Lecture (2) Brainstorming (3) Group discussion (4) Individual assignment	(1) Reports and assignment quality (2) Presentation (3) Discussion participation (4) Q & A
3. Students can communicate and discuss science in an interactive manner	(1) Group or individual assignment (2) Group or individual presentation	(1) Quality of group or individual presentation (2) Behavior in class and attendance (3) Q & A

**Course description:**

Interpretation, critical review and discussion of recent publications related to advanced knowledge and technology in molecular biology

**Fulfillment of ELOs for AUNQA**

ELO1 Integrate comprehensive knowledge in Molecular Biology and related disciplines to solve scientific research problems

ELO3 Present research findings in Molecular Biology to scientific community

ELO4 Demonstrate scientific integrity including ethical responsibilities and safety practices as appropriate

ELO5 Acquire professional and interpersonal skills for lifelong learning

**Course schedule:**

Unless specified otherwise, the course is on every Wednesday between 9.30 –11.30 am,  
Online Course.

Date	Week	Topic	Teaching Staff
6 October 2021	1	Course Orientation (*9.00-9.30 am)	Duangrudee
6 October 2021	1	Research Ethics	Apinunt
20 October 2021	2	Paper Discussion & Presentation	Poochit
27 October 2021	3	Paper Discussion & Presentation	Chalongrat
3 November 2021	4	Paper Discussion & Presentation	Sarin
10 November 2021	5	Paper Discussion & Presentation	Chartchai
17 November 2021	6	Paper Discussion & Presentation	Chalermporn
24 November 2021	7	Paper Discussion & Presentation	Panadda
1 December 2021	8	Paper Discussion & Presentation	Duncan
8 December 2021	9	Paper Discussion & Presentation	Duangrudee

\* Unusual time

**Assessment Criteria:**

Student performance 90%

Attendance 10%

Student's achievement will be graded using symbols: A, B+, B, C+, C based on the distribution of students' scores from the whole course.

**Paper Criteria**

Published within 5 years (papers were not written by the instructor)

**Date revised:** 16 August 2021

## Current Topics in Molecular Biology Rubrics

	Rating				Weight
	4	3	2	1	
<b>PREPARATION</b>					
<b>QUIZ</b>	100–80%	79–60%	59–40%	< 39%	
<b>REPORT ASSIGNMENT</b>					
<b>Theme</b>	Well organized, demonstrates logical sequencing and structure.	Well organized, but demonstrates illogical sequence or structure.	Weakly organized with no logical sequence or structure.	No organization, sequencing, or structure.	
<b>Content</b>	Clearly states aim and scope; concisely summarizes major points. Rationales are explained.	Aim and scope are stated adequately, major points are summarized. Rationale is stated but not explained.	Aim and scope are not stated. Major points are missing. Rationale is not mentioned. Reveal few knowledge on the subject.	Few points are mentioned as contents but without the line of reasoning.	
<b>References</b>	Information is cited properly and in acceptable format (e.g. Vancouver or EMBO).	Information is cited in a non-widely used format with minor errors.	Information is cited, but has major errors.	Information is not cited or is cited incorrectly.	
<b>DISCUSSION</b>					
<b>Q &amp; A</b>	Question and answer(s) are good and clearly stated.	Question and answer(s) are average.	Question and answer(s) were not significant.	Question and answer(s) were irrelevant.	
<b>PRESENTATION</b>					
<b>Content</b>	Well organized and well presented	Good to average organization and presentation	Weak	Poor	
<b>PERFORMANCE&lt;90%&gt;</b>					
<b>ATTENDANCE&lt;10%&gt;</b>	<b>On time (10%)</b>	<b>Late (7.5%)</b>	<b>Absent with Permission (5%)</b>	<b>Disappear (2.5%)</b>	
<b>TOTAL</b>					
From 100%					