

## Course Syllabus

MBMG614 Analysis of Research Publications for Molecular Biosciences (2 credits)

**Course coordinator:** Assoc. Prof. Dr. Chartchai Krittanai

**Instructors:**

1. Assoc. Prof. Dr. Chartchai Krittanai
2. Asst. Prof. Dr. Chalongrat Noree
3. Assoc. Prof. Panadda Boonserm
4. Asst. Prof. Dr. Poochit Nonejuie
5. Assoc. Prof. Dr. Chalernporn Ongvarasopone
6. Prof. Duncan Smith

**Curriculum:** Doctor of Philosophy Program in Molecular Genetics and Genetic Engineering (required course for Plan 2)

**Semester offering:** First semester

**Pre-requisites:** None

**Expected learning outcomes:** After completion of the course, students should be able to:

- (1) Analyze and extract the key messages from selected research articles
- (2) Connect current knowledge with the new information to get a deeper level of thinking skills
- (3) Analyze if the acquisition, presentation, and interpretation of the data from research articles line up well with the hypotheses, experimental design, and conclusions.
- (4) Evaluate the potential contribution of the research articles to the field of Molecular Biosciences

**Format:**

One paper published within the last 2 years will be chosen by the teaching staff and given to the students at least two week prior to discussion. This paper will be read and analyzed by the students in advance to prepare a presentation. In class the students will orally present their analysis and lead a discussion. The teaching staff will help asking some critical questions, discuss and suggest important points learning from the paper. Apart from students' performance in presentation and discussion, small assignment or short summary may also be used for student assessment. The main goal of this course is to improve the student's ability to analyze the scientific literature.

**Evaluation:**

Morality and ethics in learning and working (5%)

Identification of key messages and obtained knowledge from research article (30%)

Critical thinking to connect current knowledge with the new data (50%)

Interpersonal skills and responsibility (5%)

Presentation, Analytical and ICT skills (10%)

Analytical evaluation of current literature in molecular biosciences; oral presentation of scientific papers published within the last two years; discussion and assessment by teaching faculty to improve cognitive development.

**Course schedule:**

The course meets once every two weeks on Thursday at 1000-1200. Room A401.

**Students' email**

stampthanapon.k@gmail.com

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<b>Week Date</b>	<b>Content</b>	<b>Hour</b>	<b>Staff</b>
1 Aug-25-2022	Class orientation	3	Chartchai Krittanai
	Self-study of paper 1	2	-
2 Sep-1-2022	Presentation & Discussion of paper 1	2	Chartchai Krittanai
	Self-study of paper 2	2	-
3 Sep-15-2022	Presentation & Discussion of paper 2	2	Chalongrat Noree
	Self-study of paper 3	2	-
4 Sep-29-2022	Presentation & Discussion of paper 3	2	Panadda Boonserm
	Self-study of paper 4	2	-
5 Oct-20-2022	Presentation & Discussion of paper 4	2	Poochit Nonejuie
	Self-study of paper 5	2	-
6 Nov-3-2022	Presentation & Discussion of paper 5	2	Chalernporn Ongvarasopone
	Self-study of paper 6	2	-
7 Nov-24-2022	Presentation & Discussion of paper 6	2	Duncan Smith
	Class Evaluation and Feed back	3	Chartchai Krittanai