MBMG 522 Molecular Genetics and Genetic Engineering Seminar II

Semester 2, Academic year 2022

(1 credit)

Course learning outcomes (CLOs): Upon completion of this course, students are able to:

1. Acquire a scientific presentation skill that is related to their thesis research.

2. Become familiar with current research in molecular genetics, genetic engineering and related disciplines.

3. Participate actively in scientific discussions and summarize the content of a seminar presentation.

Format:

1. Students will be giving seminar based on their thesis research including rationale and research questions; results obtained from student's research; comparative discussion with previous studies in related topics; ethics in research citation.

2. Presentation will be performed to an audience for approximately 30 minutes, follow by answering questions from the floor for approximately 15 minutes.

3. Students are required to **write an abstract (not more than 250 words)** and submit to the course coordinator 1 week before the presentation date.

4. After the presentation, every student will be asked question(s) related to the presentation.

5. Students who miss the deadline for each category will be subjected to a penalty.

Evaluation:

1. Presentation (80%):

Seminar content and scientific merit (40%):

Introduction:

- Defines background and importance of research.

- States objective, and is able to identify relevant questions.

Body:

- Presenter has a scientifically valid argument.

- Addresses audience at an appropriate level (rigorous, but generally understandable to a scientifically-minded group).

- Offers evidence of proof/disproof.

- Describes methodology.

- The talk is logical.

Conclusion:

- Summarizes major points of talk.

- Summarizes potential weaknesses (if any) in findings.

- Provides you with a "take-home" message.

Presentation techniques, slide/transparency quality, ability to use English (20%):
- Graphs/figures are clear, understandable and not distracting.
- The text is readable and clear.
- Appropriate referencing of data
- Speaks clearly and at an understandable pace.
- Maintains eye contact with audience.
- Well rehearsed (either extemporaneous or scripted presentation).
- Speaker uses body language appropriately.
- Speaker is dressed appropriately.
- Speaker is within time limits.

Answering questions (20%):
- Speaker is able to answer questions.

2. *Performance throughout the course (20%)*
-Writing abstract for the presentation (5%)
- Participation actively in the class (15%):
- asking questions (minimum 5 questions)
- punctuality, attending the class, etc.

Course coordinators: Assoc. Prof. Kanokporn Triwitayakorn, Ph.D.
(kanokporn.tri@mahidol.ac.th)

Date, Time	Students	ID	Topics
		MBMG 522 Seminar II, 2022	

Date, Time	Students	ID	Topics
March 29, 2023 (A107)			
10:00-10:45	Miss. Sutida Poonthavee	6437022 MBMG/M	Analyzing the interaction between Zika virus E protein and phosphoglucomutase 1
10:45-11:30	Mr. Kittapart Chantakorn	6436589 MBMG/M	Study of Phage-Antibiotic Synergy (PAS) against Uropathogenic *Escherichia coli* (UPEC)
March 31, 2023 (A107)			
10:00-10:45	Mr. Pongsatorn Khunrach	6436587 MBMG/M	Thermal stability improvement of a vegetative insecticidal protein from *Bacillus thuringiensis* by protein engineering
10:45-11:30	Miss. Nitchakun Samati	6436207 MBMG/M	Study of factors affecting inflammatory response of microglia under the condition that mimic brain ischemia
April 5, 2023 (A107)			
10:00-10:45	Mr. Channarong Nasalingkhan	6436586 MBMG/M	Identification of gene(s) influencing filament formation of yeast aldehyde dehydrogenase IV
10:45-11:30	Mr. Sittichok Sonkamkaew	6437019 MBMG/M	Roles of miRNAs on ineffective erythropoiesis in β-thalassemia/Hb E
April 7, 2023 (A107)			
10:00-10:45	Miss. Jirarud Kenkit	6436588 MBMG/M	Hemoglobin F inducer from Thai Medicinal Plants
10:45-11:30	Miss. Chutathip Kimram	6437021 MBMG/M	Iron-induced cognitive impairment in β-thalassemia mouse

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Evaluation Sheet

1	2	3	4	5
Unsatisfactory Needs significant improvement	**Needs improvement**	**Average**	**Above average**	**Excellent**

Abstract (5%)

Included all information of Background, Methods, Results, and Conclusions → 1 • 2 • 3 • 4 • 5

English grammar and spelling were properly used → 1 • 2 • 3 • 4 • 5

Seminar content (40%)

− *Introduction*

Described the importance of the problem/topic → 1 • 2 • 3 • 4 • 5

Provided sufficient background information → 1 • 2 • 3 • 4 • 5

The research question/hypothesis and objectives were described clearly → 1 • 2 • 3 • 4 • 5

− *Methods*

The rationale for each experiment was explained → 1 • 2 • 3 • 4 • 5

Key techniques used were described → 1 • 2 • 3 • 4 • 5

− *Results*

Key results were clearly described with adequate supporting data → 1 • 2 • 3 • 4 • 5

Speaker gave critical analysis and interpretation of results → 1 • 2 • 3 • 4 • 5

− *Discussion and conclusions*

The main finding/points were summarized → 1 • 2 • 3 • 4 • 5

Discussed about significance of the work and direction of further research → 1 • 2 • 3 • 4 • 5

− *Overall*

Two or more presented papers were well combined to a single story → 1 • 2 • 3 • 4 • 5

Choice of the papers → 1 • 2 • 3 • 4 • 5

Presentation techniques (20%)

Slides were clear and easy to follow (fonts, charts, images, and page number) → 1 • 2 • 3 • 4 • 5

Each slide had appropriate amount of information and was easily understood → 1 • 2 • 3 • 4 • 5

The number of the slides and time devoted to each slide was appropriate → 1 • 2 • 3 • 4 • 5

The transitions between slides were clear → 1 • 2 • 3 • 4 • 5

English speaking was natural and comprehensible → 1 • 2 • 3 • 4 • 5

Answering questions from the audience (20%)

Gave clear, concise, logical answers → 1 • 2 • 3 • 4 • 5

Demonstrated knowledge about basic principles, ideas, and concepts → 1 • 2 • 3 • 4 • 5

Displayed in-depth understanding of the topic → 1 • 2 • 3 • 4 • 5

Gave suggestions if not sure of an answer → 1 • 2 • 3 • 4 • 5

Title__(Font Time New Roman, size 16, bold)_____

Date:_____Time:_____(Font Times, size 16 unbold)_____

Speaker:_____(Font Times, size 16 unbold)_____

_____

Abstract (Font Times, size 14, bold)

Text ------- Font Times, size 12 unbold, 1.5 line spacing

Only 1 page (about 250 words)

Content in abstract should include short background, purpose of the study, short experimental design (if necessary), results and short summary.

References (2-3 major references) can be included.

Due date: A week before the presentation date.