

Syllabus

Experimental Molecular and Cellular Biology

Course Name	Course type (credit/hours)		전선(3/3)		Course code	
	Target students Division/major/grade		생명과학과/		Opening semester	2017년 1학기
	Class time and classroom		목6(원242) 목7(원242) 목8(원242)(원242)			
Reference to this course	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)					
	Office Room Number		Office phone Number	1886	e-mail	jsjlee@ajou.ac.kr
	Office hours		Homepage address			
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

This lecture will introduce currently developed or widely used experimental methods in molecular and cellular biology and provide the basic concept and principle, and application processing into pure research studies in life sciences or biological industry including biologics.

2. Course Objectives

교육목표: 최근 분자세포학에서 개발되었거나 널리 이용되고 있는 다양한 분자세포학적 접근 방법과 원리에 대하여 소개하고 토론하여 연구에 활용할 수 있도록 한다.

학습성과

1. 널리 오랫동안 이용하고 있는 다양한 분자세포학적 접근 방법과 원리를 이해한다
2. 최근 개발된 분자세포학적 접근 방법과 원리를 이해하고 설명할 수 있다.
3. 이 방법들을 도입하여 자신의 연구에 적용하고 활용할 수 있다.

Students who successfully complete this course will acquire a firm and rigorous foundation in the principles and protocols of modern as well as classical molecular and cellular biological methodology and further ability to apply these methods to their own researches.

3. Class types and activities

- The basic principles and methods will be lectured by Dr. Jong-Soo Lee.
- Once the basic understanding is covered via lectures, the advanced development in the related paper will be presented and discussed by course attendants in the format of journal club presentation.
- Through these processes, course attendants can apply new methods to their own researches.

4. Teaching Method

The basic concept and principles of molecular cellular methods and technics will be lectured by the course organizer (Dr. Jong-Soo Lee). Once the basic knowledge is covered via lectures, the papers related to the lecture subject methods will be presented and discussed by course attendants in the format of journal club presentation.

담당교수가 분자세포학적 방법과 기술에 대한 원리와 개념에 대하여 강의를 제공한다. 이후 이 주제와 관련이 있는 논문을 읽고 발표하며, 이 논문의 연구 방법과 내용에 대하여 토론한다.

5. Knowledge and ability required for taking this course

6. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		20	Attendance
midterm exam			
final exam		50	In-hour exam
quiz			
presentation		30	Presentation material and skill
discussion		20	Additional points for active participation in discussions and questions
homework			
etc			

1. presentation and participation : 40%
- 2 final exam : 40% (open book in hour exam)
3. presentation : 20%

7. Textbooks

Main/Sub	Title	Writer	Publisher	Publication year
No Data				

8. Lecture Schedule

Week	Lecture contents	Lesson type	Remark
1	Introduction	Lecture	
2	Methodology I	Lecture and Presentation	
3	Methodology II	Lecture and Presentation	
4	Methodology III	Lecture and Presentation	
5	Methodology IV	Lecture and Presentation	
6	Methodology V	Lecture and Presentation	
7	Methodology VI	Lecture and Presentation	
8	Mid term and Catch-up	Self-study	
9	Methodology VII	Lecture and Presentation	
10	Methodology VIII	Lecture and Presentation	
11	Methodology IX	Lecture and Presentation	
12	Methodology X	Lecture and Presentation	
13	Methodology XI	Lecture and Presentation	
14	Methodology XII	Lecture and Presentation	
15	Catch-up	Lecture and Presentation	
16	Final exam	Exam	

9. Others

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