

## 2016학년도 2학기 수업계획서

과목명	면역화학
학점(시간)	3(3)
이수구분	전공핵심
수강번호	01
강의시간	
강의실	
교수명	박현호
소속	화학생화학부
면담시간	월요일 17:00 ~ 18:00

※동일과목:

※선수과목:

※선행과제 :

### 1. 강의소개 :

Immunology is a broad branch of biomedical science that covers the study of all aspects of the immune system in all organisms. It deals with the physiological functioning of the immune system in states of both health and disease. Immune system is tightly involved in human health and malfunction of the system leads to immunological disorders such as autoimmunity, AIDS, allergy, and cancer. Lecture will deal with basic concept of immunology.

### 2. 수업목표 :

To learn basic concept of immunology  
 To learn the relationship b/w immune system and human disease  
 To learn from innate immunity to adaptive immunity  
 To apply immunology lecture to treatment of immune disorder.

### 3. 수업진행방법 :

PPT material will be prepared and uploaded before the lecture.  
 I will give a lot of opportunities for free english talking, discussing the lecture.  
 Student should voluntarily participate in the discussion.

### 4. 중요교재 및 문헌 :

Main text : Immunobiology, A short course (5th)  
 Richard Coico

Supportive text: Immunobiology  
Charles A Janeway

5. 수업의 효율성 제고를 위한 기타사항(선수과제 제시 권장) :

.

6. 학습평가 :

Mid-term exam: 30%

Final exam: 40%

Quiz : 10%

Report : 10%

Attendance: 10%

7. 주별계획

주	학습목표 및 목차	주교재 및 참고자료	퀴즈/과제/토론 유무
1	Introduction of Immunology History of Immunology		
2	Elements of the immune system and their roles (I) Elements of the immune system and their roles (II)		
3	Innate Immunity (I) Innate Immunity (II) (1st Quiz)		
4	Brief introduction of Adaptive Immunity Immunogens and antigens		
5	Antibody structure and function (I) Antibody structure and function (II)		
6	Generation of antibody diversity (I) Generation of antibody diversity (II)		
7	Mid-term exam		
8	Role of MHC in the immune response		

7. 주별계획

주	학습목표 및 목차	주교재 및 참고자료	퀴즈/과제/토론 유무
	Biology of the T lymphocyte (I)		
9	Biology of the T lymphocyte (II) Biology of the B lymphocyte		
10	Activation and function of T and B cells (I) Activation and function of T and B cells (II)		
11	Apoptosis and immune system Cytokine (I)		
12	Cytokine (II) Failure of Immune system: Tolerance, autoimmunity and autoimmune disease		
13	Failure of Immune system: Hypersensitivity reactions Failure of Immune system: Immunodeficiency disorders		
14	Tumor Immunology (I) Tumor Immunology (II)		
15	Final exam		