Human Molecular Genetics

CATHOLIC UNIVERSITY OF KOREA

Course Syllabus

2014학년도 제2학기

Course Title	Korean	인류분자유전학			
	English	Human Molecular Genetics			
Course Number-Division	02070-01	Course Completion Requirement	제1전공선택	Time/Credits	3/3
Day / Time	화2~3(M301), 목 3(M301)	Course Target Audience		Prerequisite Courses	
Professor	Full Name	Office	Phone Number	E-MAIL	
	황혜진		4476	hzhwang@daum.net	
Web Site			English Class	C형	

1.Course Outline

Because genetic knowledge and technology is rapidly being transferred to many areas of our society, it is imperative that the general pulblic, elected officials, and policy makers outside the scientific community as well as speicialists have a working knowledge of genetics to help shape how genetics and its associated technologies will be used in our society. To help communicate this knowledge, this class transmits the principles of genetics in a easy and straightforward way. Anyone who have taken general biology could be able to enjoy this class.

2. Objectives

Goals of this class

1. To get essential concepts underlying human genetics in clear and concise.
2. To understand the social, cultural, and ethical implications associated with the use of genetic technology.
3. To have cosiderable explanations of the origin, nature, and amount of genetic diveristy present in the human population and how that diversity has been shaped by natural selection.

3. Teaching Method

Lecture with ppt and video clips

4. Evaluation Method

Test 80%, Homework 10%, attendance 10%

5. Assignments

Exercise questions & Reading papers

6. Experiment, Practical Exercise

N.A.

7. Related Courses

Genetics, Molecular Biology. General biology

8. Textbook

Book Title	Publisher	Author	Year	Textbook or not
Human Heredity 10/e	Cengage Learning; 10 edition	M. R. Cummings	2014	교재
Medical Genetics	Oxford Publishing	Ian D. Young 저	2006	참고도서
Human Molecular Genetics 4/e	Taylor & Francis	Tom Strachan 저	2010	참고도서
Introduction to Human Molecular Genetics 2/E	Wiley	Pasternak 저	2004	참고도서

9. Detailed Weekly Activities

Week	Date	Lecture Content	Reference Material	Remarks
1	2014-09-01 ~ 2014-09-07	A perspective on Human Genetics	Textbook, chapter 1.	
2	2014-09-08 ~ 2014-09-14	Cells and cell division	Textbook, chapter 2.	
3	2014-09-15 ~ 2014-09-21	Transmission of Genes from generation to generation	Textbook, chapter 3	
4	2014-09-22 ~ 2014-09-28	Pedigree analysis in Human Genetics	Textbook, chapter 4	
5	2014-09-29 ~ 2014-10-05	The inheritance of Complex Traits	Textbook, chapter 5	
6	2014-10-06 ~ 2014-10-12	Cytogenetics: Karyotype and Chromosome aberrations	Textbook, chapter 6	
7	2014-10-13 ~ 2014-10-19	Development and Sex determination	Textbook, chapter 7	
8	2014-10-20 ~ 2014-10-26	Midterm Exam		
9	2014-10-27 ~ 2014-11-02	Genome Alterations: Mutation & Epigenetics	Textbook, chapter 11	
10	2014-11-03 ~ 2014-11-09	Genes and Cancer	Textbook, chapter 12	
11	2014-11-10 ~ 2014-11-16	Introduction to Genetic Technology	Textbook, chapter 13 Video Clips	
12	2014-11-17 ~ 2014-11-23	Biotechnology and Society	Textbook, chapter 14	
13	2014-11-24 ~ 2014-11-30	Reproductive Technology, Genetic testing, and Gene therapy	Textbook, chapter 16	
14	2014-12-01 ~ 2014-12-07	Genetics of Behavior	Textbook, chapter 18	
15	2014-12-08 ~ 2014-12-14	Population Gentics and Human Evolution	Textbook, chapter 19	
16	2014-12-15 ~ 2014-12-21	Final Examination		