Syllabus

Seminar in Algebra II

Course Name	Course type (credit/hours)	전선(3/3)		Course code	
	Target students Division/major/grade	수학과/		Opening semester	2017년 2학기
	Class time and classroom	월B(팔621) 목B(팔621)(팔621)			
Reference to this course	Related basic courses	대수학1, 대수학2, 조합론 및 응용			
	Recommended concurrent courses				
	Related advanced courses				
Instructor	Name (title/division)	조수진(교수/수학과)			
	Office Room Number	팔달관 617호	Office phone Number	2557	e-mail	chosj@ajou.ac.kr
	Office hours		Homepage address		
Teaching Assistant	Name (title/division)				
	Office Room Number		Office phone Number		e-mail	

1. Introduction

Basic theory of 'Group Repressentations' will be explained mainly with Symmetric Group.
We can see how abstract algebra and linear algebra can be applied in developing 'Group Representation Theory'.
We will start with character theory and then understand the representation of the Symmetric Groups in both algebraic and combinatorial points of view.

2. Course Objectives

3. Class types and activities

The class will consists of lectures and presentations by the students.
Exercise problems in the test will be assigned as homework problems,

4. Teaching Method

The class will consists of lectures and presentations by the students.
Exercise problems in the test will be assigned as homework problems,

5. Knowledge and ability required for taking this course

6. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam	1	30	
final exam	1	40	
quiz			
presentation	1	15	
discussion			
homework	4	15	
etc			

7. Textbooks

Main/Sub	Title	Writer	Publisher	Publication year
주교재	The Symmetric Group; Representations, Combinatorial Algorithms, and Symmetric Functions	Bruce Sagan	Springer	2000

8. Lecture Schedule

Week	Lecture contents	Lesson type	Remark
1	I. Group Representations	강의	
2	I. Group Representations	강의	
3	I. Group Representations	강의	
4	I. Group Representations	강의	
5	I. Group Representations	강의	
6	I. Group Representations	강의	
7	II. Representatios of the Symmetric Group	강의	
8		중간고사	
9	II. Representatios of the Symmetric Group	강의	
10	II. Representatios of the Symmetric Group	강의	
11	II. Representatios of the Symmetric Group	강의	
12	III. Combinatorial Algorithms	발표	
13	III. Combinatorial Algorithms	발표	
14	III. Combinatorial Algorithms	발표	
15	III. Combinatorial Algorithms	발표	
16		기말고사	

9. Others