# 课程大纲 COURSE SYLLABUS

1.	课程代码/名称 Course Code/Title	MAT7075 代数几何 Algebraic Geometry
2.	课程性质 Compulsory/Elective	专业选修/Elective
3.	课程学分/学时 Course Credit/Hours	3/48
4.	授课语言 Teaching Language	中英双语/English and Chinese
5.	授课教师 Instructor(s)	李展,胡勇,邱雁南/Li,Zhan; Hu,Yong; Qiu, Yannan
6.	是否面向本科生开放 Open to undergraduates or not	是/Yes
7.	先修要求 Pre-requisites	(如面向本科生开放,请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)  MA214 抽象代数/Abstract algebra 无区别/No differences

## 8. 教学目标

### **Course Objectives**

(如面向本科生开放,请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)

介绍层论,概型的性质。Introduce sheaf theory and properties of schemes.

无区别/No differences

## 9. 教学方法

## **Teaching Methods**

(如面向本科生开放,请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)

课堂教学/Lectures 无区别/No differences

### 10. 教学内容

#### **Course Contents**

(如面向本科生开放,请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)

	Section 1	背景知识/Background materials
	Section 2	层/Sheaves
	Section 3	概型的性质/First properties of schemes
	Section 4	层模/Sheaves of modules
	Section 5	除子/Divisors

Section 6	射影映射/Projective morphisms
Section 7	微分/Differentials
Section 8	可分与完备映射/Separated and proper morphisms
Section 9	
Section 10	
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## 11. 课程考核

#### **Course Assessment**

(①考核形式 Form of examination; ②.分数构成 grading policy; ③如面向本科生开放,请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)

考试/Exam;

作业 40% 期末考试 60%; Homework 40% Final Exam 60%.

无区别/No differences

## 12. 教材及其它参考资料

## **Textbook and Supplementary Readings**

Algebraic Geometry, Springer 1977, Robin Hartshorne