课程大纲
COURSE SYLLABUS

1.	课程代码/名称 **Course Code/Title**	MAT8041 抽象代数 III Abstract Algebra III
2.	课程性质 **Compulsory/Elective**	必修 Compulsory
3.	课程学分/学时 **Course Credit/Hours**	3/48
4.	授课语言 **Teaching Language**	English
5.	授课教师 **Instructor(s)**	李才恒，Vyacheslav Futorny，Iryna Kashuba，冯致程
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 Algebra （No difference for undergrad students）
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.） 了解和掌握代数学的基本对象包括环论及模论，群表示论，和典型群的基本思想和基础知识，培养学生在今后的科研中应用基本的代数工具的能力。 The aim of this course is to introduce the fundamental theory of ring theory, module theory, group representation theory, and classical groups. It aims to build up the algebra foundation for further study of mathematics.	
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.） 主要是讲授，结合研究讨论 Lecturing, associated with group study of special topics.	
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	环论和模论；Ring theory and module theory. 约 16 小时， around 16 hours
	Section 2	群的线性作用和群表示论，linear actions of groups and group representations, 约 16 小时， around 16 hours
	Section 3	典型群及其子群结构，classical groups and their subgroups, 约 16 小时，around 16 hours.
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.）
	Paper Exams. HW: 30%, Midterm: 20%, Final: 50%
12.	教材及其它参考资料 **Textbook and Supplementary Readings**
	典型群，王杰 Finite simple groups, by Robert Wilson Classical groups and their subgroups, Lecture Notes by Hua PeiCe and Li CaiHeng