课程大纲
COURSE SYLLABUS

1.	**课程代码/名称** **Course Code/Title**	**电子材料先进表征技术** **Advanced Characterization Techniques for Electronic Materials**
2.	**课程性质** **Compulsory/Elective**	Elective
3.	**课程学分/学时** **Course Credit/Hours**	1 学分/16 学时
4.	**授课语言** **Teaching Language**	英语 English
5.	**授课教师 Instructor(s)**	Aung Ko Ko Kyaw
6.	**先修要求** **Pre-requisites**	无

7. 教学目标 Course Objectives

To understand the various characterization techniques that can used for electronic materials
To be able to apply these techniques in the analysis of electronic materials and research

8. 教学方法 Teaching Methods

Lecture, Demonstration

9. 教学内容 Course Contents

Section 1	Introduction and Fundamentals,
Section 2	Surface and Structural Analysis
Section 3	X-Ray Photoelectron Spectroscopy
Section 4	Auger Electron Spectroscopy
Section 5	Scanning Tunneling Microscopy
Section 6	Atomic Force Microscopy
Section 7	X-ray Diffraction and Synchrotron
Section 8	Scanning Electron Microscopy
Section 9	Transmission Electron Microscopy
Section 10	Four-Point Probe and Conductivity Measurement
……	

10. 课程考核 Course Assessment

Class Assignment and Participation (20%)
Quiz (30%)
Project (50%)

11. 教材及其它参考资料 Textbook and Supplementary Readings

Sam Zhang, Lin Li, Ashok Kumar, Materials Characterization techniques, 1st Edition