

课程大纲

COURSE SYLLABUS

1.	课程代码/名称 Course Code/Title	Selected Topics in Microwave Device Design
2.	课程性质 Compulsory/Elective	Elective
3.	课程学分/学时 Course Credit/Hours	1 credit/16 hours
4.	授课语言 Teaching Language	English
5.	授课教师 Instructor(s)	Yu Ming
6.	是否面向本科生开放 Open to undergraduates or not	No
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.) No
8.	教学目标 Course Objectives	<p>(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.)</p> <p>This course introduces a series of advanced topics in the area of microwave devices including filters and antennas. Therefore, students will be given opportunities to probe into the world of microwave hence enhancing their understandings to a deeper level. Throughout exploring these topics, students will participate in hands-on projects to examine how theories are put into practice and illustrates their own comprehension concerning certain areas, which enables them to think independently and promotes their creative skills.</p> <p>After taking this course, students will be able to:</p> <ol style="list-style-type: none"> 1. Achieve deeper understandings of microwave filters and antennas 2. Examine the differences between fundamental theories and practices 3. Present their own comprehensions. 4. Think and work independently.
9.	教学方法 Teaching Methods	<p>(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.)</p> <p>Lectures/Flipped Classroom/Discussions</p>
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	Introduction
Section 2	Advanced Synthesis of Microwave Filter(1)
Section 3	Advanced Synthesis of Microwave Filter(2)
Section 4	Advanced Synthesis of Microwave Antennas(1)
Section 5	Advanced Synthesis of Microwave Antennas(2)
Section 6	High Power Effects of Microwave Filters
Section 7	Group Presentations
Section 8	Conclusion

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.)

Form of examination and grading policy

① In-class quiz (20%)

Regarding the topics covered in class, there will be pop-up in-class quizzes to check students' understandings and reflect on teaching methods.

② Participation (30%)

Students are required to attend every section of this course and their participation in discussions along with their presentations are critical for their participation grades.

③ Group presentation (50%)

Students will form their own groups. Each group will present one of the advanced topics in microwave filters and antennas. In the presentation, the group has to use PowerPoint to give a lecture, lead discussions and provide practices.

This class will not include a final exam.

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

Assorted references papers provided by the instructor