

MATH 519

Complex Geometry

(2019 Fall Semester)

by
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Prerequisites: Consent of the instructor

Credits: (3-0)3 / 7 ECTS

Outline(tentative): This is an introductory course on complex geometry. However, we will stick to the algebraic viewpoint. At certain times I will remark the analogous statements in the language of complex geometry and mention the connections/relations with the topics that you know. We will study mostly algebraic curves. Our text book is Lorenzini's *An Invitation to Arithmetic Geometry*. The students are expected to present at least one topic each week.

Some advanced undergraduate knowledge on algebra is necessary. The following is a tentative weekly outline :

Week 1 & 2 Chapter 1
Week 3, 4 & 5 Chapter 2
Week 6, 7 & 8 Chapter 3
Week 9 Chapter 4
Week 10 Chapter 5 (up to and including §5)
Week 11 & 12 Chapter 6
Week 13 & 14 Chapter 9

Bibliography:

- Lorenzini, *An Invitation to Arithmetic Geometry*

Program: Monday , 09h00 - 12h00 Seminer II

Evaluation:

- Presentations & Homeworks: %60
- Final: % 40