

Instructor: Salim Tayou

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External website with course advance: https://people.math.harvard.edu/~tayou/Topic_class.html

Syllabus:

Schedule:

- **Meeting times:** Tuesday-Thursday 09:00 AM-10:15 AM.
- **Room:** Science center 112.
- **First meeting:** Tuesday, January 25, 2022.
- **Office hours:** Monday 1 to 2PM and Wednesday 5 to 6PM in Science Center 238.

Recommended books:

The main references for the first part of the class are the following books:

- Claire Voisin, Hodge theory and complex algebraic geometry I & II.
- Philip Griffiths and Joseph Harris, Principles of algebraic geometry.
- Chris Peters and Joseph Steenbrink, Mixed Hodge structures.

Prerequisites:

Good background in complex analysis (Math 113), algebraic geometry (Math 232), differential geometry (Math 136), and algebraic topology (Math 231).

Grading:

There will be weekly homework which will count for 80% of the final grade. No late homework will be accepted (except under special circumstances) and the lowest score will be dropped. Collaborative work on homework is accepted but you must write your own solution as well as the names of the collaborators. There will be a final project which consists of writing a short report on a topic tangentially treated in class and giving a 50 minute presentation about it. Together with participation, the final project will count for the remaining 20% of the grade.