

MATH 722: DIFFERENTIAL TOPOLOGY 2

Spring 2019 Syllabus

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Office hour: Wednesday 1-4pm

Overview:

The course this year will focus on **Morse theory**.

References:

Audin; Damian - Morse theory and Floer homology
Hutchings - Floer homology of families

Presentation:

Each of you will choose a topic in relation with the course and give a 50 minutes (or longer) presentation.

Sample topics:

1. Foliations.
2. Basic Floer theory.
3. Witten deformation.
4. Homogeneous spaces.
5. Equivariant cohomology.

Grading:

Presentation	50%
Take-home final exam	50%