## MATH 4900F: SEMINAR

## PO-LAM YUNG

## Scheme of Work

- Week 1: Organizational meeting, deciding on the topics
- Week 2–4: Self study + preparation of notes (see Remark 1)
- Week 5: Introductory Presentation (see Remark 2)
- Week 6–7: Self study + preparation of notes (see Remark 1)
- Week 8–9: Progress report (see Remark 3)
- Week 10–11: Self study + preparation of notes (see Remark 1)
- Week 12–13: Final presentation (see Remark 4)

## Assessment Scheme

- Written notes 5% each
- $\bullet$  Introductory Presentation 15%
- Progress report 30%
- Final presentation 30%
- Class participation 10%

**Remark 1.** Each student should write up his / her own notes. It should just be a summary of the material to be presented, and should be 1 to 2 pages maximum. The notes should be sent to the instructor at least 3 days before the presentations. They will be evaluated in terms of content, clarity and pedagogy. Each piece of notes counts towards 5% of your grade.

**Remark 2.** Each student will give a presentation of 10 minutes about what he / she is going to study. A good presentation should include:

- Some introductory / background material
- Questions to be considered
- How one would approach the questions raised
- Useful references for the audience

The presentation will be evaluated in terms of content, clarity and pedagogy. It counts towards 15% of your grade.

**Remark 3.** Each student will give a presentation of 20 minutes about his / her progress. Some possible elements of a good presentation are:

- Statement of one of the most interesting theorems studied so far
- Sketch of proof (or alternative proofs) of that theorem if appropriate
- Additional references you have found since the introductory presentation
- A study scheme for the next few weeks

(You do not need to include them all; they are just examples of good elements to help you prepare for the presentation.)

The presentation will be evaluated in terms of content, clarity and pedagogy. It counts towards 30% of your grade.

**Remark 4.** Each student will give a presentation of 20 minutes, summarizing what he / she has done. Some possible elements of a good presentation are:

- Statement of one of the most interesting theorems learned in this course
- Sketch of proof (or alternative proofs) of that theorem if appropriate
- Materials that supplement the topic of your presentation
- Connections to other mathematics you have learned elsewhere
- Further possible directions of investigation

(You do not need to include them all; they are just examples of good elements to help you prepare for the presentation.)

The presentation will be evaluated in terms of content, clarity, pedagogy, and response to questions raised during / after the presentation. It counts towards 30% of your grade.

**Remark 5.** Another 10% of your grade will be determined by your own class participation (e.g. engagements in other students' presentations).

**Remark 6.** As an optional exercise, you may choose to write up an article about the topic you have studied in this capstone course. On top of being a good memory for yourself, a write-up of high quality could also be published in some undergraduate journals, or be posted somewhere online.