

## Spring 2017 MATH25500-01 Optional Oral Exam Application Form

Name: \_\_\_\_\_

### **Oral Exam Policies**

- The examinee should apply for an oral exam by submitting this form no later than 12th May 2017, 23:59. Scanned copy sent from Hunter College email address accepted.
- The examinee initiate scheduling a day and a time with the instructor by email no later than May 12th 23:59.

Location: HE924. Available time (or by appointment):

May 12th 11:30--12:00	May 16th 11:30--12:00	May 19th 11:30--12:00
May 12th 12:00--12:30	May 16th 12:00--12:30	May 19th 12:00--12:30
May 12th 12:30--13:00	May 16th 12:30--13:00	May 19th 12:30--13:00

- There is no rescheduling for any reasons (including documented emergencies). If the examinee does not take the exam after submitting this form, 15% of total score will be subtracted from the final score. This penalty does not apply if the absence is appropriately documented by 19th May 2017, 15:25.
- Grading policy: Once final grades are determined without applying results from this oral exam, for those who have taken the oral exam, a 15% of the total score pro-rated by the % score from this exam will be added to the total grade and assign the corresponding grade. This may or may not change the final grade of the examinee, but will not change grades of other students.
- On instructor's official record, the ranking will not be changed. For example, if you were the 10th with 85% of total score, have gotten 100% from this oral exam, and your total score became 100%, your ranking in this class will be still the 10th and not the 1st.
- The examinee gives a presentation for 30 minutes and will start with the score 100%. During the presentation, the instructor will ask at most 10 questions. For each answer not addressing the question, 20% of score will be subtracted, and the exam ends if the 30 minutes of time is over or all 10 questions are asked.
- **Warning:** The above item implies that there is a penalty for doing poorly in this oral exam. For example, if you give wrong answers to all 10 questions, you will lose 15% of total score (which is equivalent to the full score from a half of homework).

- The examinee should choose one item from the list below.
  - Define the Gauss Curvature and the Mean Curvature as the product and the average of principal curvatures, respectively. Prove the formulas (2) and (3) in pages 414--415 of Marsden and Tromba by using the definition of Gaussian curvature and the Mean Curvature using principal curvatures.
  - State and prove Gauss' Theorema Egrigium.
  - State and prove Gauss-Bonnet theorem.
  - State and prove Morse theorem.
- The presentation and boardwork will be voice-recorded and photographed.
- The result will be announced upon the end of the oral exam, and the instructor's decision is final. Any dispute should be directed to the Hunter College administration.

Date(s) and time(s) of the exam: \_\_\_\_\_ (Will be confirmed by email)

Topic: \_\_\_\_\_

Examinee (Signing here means you agree with the policy.)

Signature \_\_\_\_\_ Date \_\_\_\_\_