

COURSE SYLLABUS - FALL 2016

MATH 492  
UNDERGRADUATE SEMINAR  
(2 credits)

**Time:** 3:10pm-5:00pm M, CARVER 128

**Instructor:** Bernard Lidický, 422 Carver Hall, lidicky@iastate.edu  
Web page: <http://orion.math.iastate.edu/lidicky/492/>  
Office hours: 1:00pm–2:00pm T and 10:00am–11:00am W

**Brief description of goals and objectives:** Introduction to independent mathematical thought, with emphasis on oral communication of an advanced topic. Seminar content varies. In this particular semester, we try practice how to give a math talk and how to

**Prerequisites:**  
MATH 317 or MATH 407

**Textbook:**

**Proofs from the book** by Martin Aigner and Günter M. Ziegler

Free PDF from ISU: <http://link.springer.com.proxy.lib.iastate.edu/book/10.1007/978-3-662-44205-0>

You can get a new printed copy from the same link for about \$30 (including shipping).

Optional textbook can be obtained here: <http://kam.mff.cuni.cz/~matousek/stml-53-matousek-1.pdf>

**Online resources:** The class has a webpage <http://orion.math.iastate.edu/lidicky/492/>. The webpage contains basic information about the class and class schedule. The Blackboard contains grades.

**Grading policy:** You will be get credits towards the grade by

- attending (14× 1%)

- presenting ( $3 \times 20\%$ )
- talking with instructor prior your individual presentation ( $2 \times 5\%$ )
- attending seminars or colloquia in the department ( $2 \times 8\%$ )

Grades thresholds are 90% for A, 80% for B, 70% for C and 60% for D. Below 60% is F.

**Class outline:** Every class will consist of four 20 min presentations by the students. After every presentation will follow a feedback to the presenter and a short break.

**Presentations:** Every student will have three 20 min presentations. The first one will be shared with another student. The other two are individual.

**First Presentation:** The first presentation is will be 20 min shared by two students (they should share speaking time). Students need to pick topic from the textbook. The format of the presentation is up to the presenters.

**Second and third presentation:** One presentation must significantly use chalk talk and the other must significantly use technology (slides or doc camera).

Students may form pairs and present in pairs (but then the timeslot is 40min, speaking time should be shared equally). It is also possible to combine second and third presentation together and give one 40min talk (which significantly uses technology as well as board).

The presentation can be on any approved math topic. Approved is any topic from the textbook and supplemental textbook. Additional topics are subject to approval by the instructor. In general, the topic needs to have (solid) mathematical background.

Before your individual presentations, you should submit an abstract of your talk to the instructor. Roughly a week ahead.

**Talking with instructor:** In the week (or two) before your individual presentation you are required to visit the instructor and show an outline of what you have.

**Attendance:** Attendance is part of your grade. If you are not presenting, you will be providing feedback to the students presenting.

**Attending Seminar:** You should go visit two seminars or colloquia of the math department. You will be provided with a form that you need to fill about the talk and let some faculty attending the seminar sign it.

**Classroom etiquette:** Communication devices must remain switched off during the class periods. Laptops, iPads or phones during the class are allowed only for presentation purposes.

**Academic dishonesty:** The class will follow Iowa State University's policy on academic dishonesty. Anyone suspected of academic dishonesty will be reported to the Dean of Students Office. <http://www.dso.iastate.edu/ja/academic/misconduct.html> Note that if I catch somebody cheating, I have to report it.

**Disability accommodation:** Iowa State University complies with the Americans with Disabilities Act and Sect 504 of the Rehabilitation Act. If you have a disability and anticipate needing accommodations in this course, please contact instructor to set up a meeting within the first two weeks of the semester or as soon as you become aware of your need. Before meeting with the instructor, you will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 on the main floor of the Student Services Building. Their telephone number is 515-294-7220 or email [disabilityresources@iastate.edu](mailto:disabilityresources@iastate.edu). Retroactive requests for accommodations will not be honored.

**Dead week:** There will be a presentations during the dead week.