Syllabus for MAT 175E — Abstract Mathematics
2022-2023 Fall Semester [1]

Instructor:

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Textbook:

"Proofs and Fundamentals: A first course in abstract mathematics", by E.D. Bloch
(The textbook and our lecture notes will be enough to comprehend the course)

Suggested books for further reading:

"How to Prove It: A Structured Approach", by D.J. Velleman
"Proofs and Concepts: the fundamentals of abstract mathematics", by D.W. Morris and J. Morris

Subjects to be covered:

Weeks	Topics	Chapters from the Textbook
01	Logic	Ch.1
02	Logic	Ch.1
03	Quantifiers	Ch.1
04	Proofs	Ch.1, Ch.2
05	Proofs	Ch.1, Ch.2
06	Sets	Ch.3
07	Functions	Ch.4
08	Midterm	
09	Functions	Ch.4
10	Relations and equivalence relation	Ch.5
11	Order relations, posets and Zorn's lemma	Ch.7 (7.4)
12	Cardinality	Ch.6
13	Cardinality, Proof by induction	Ch.6
14	Special topics	

Exams, homework assignments, their dates and grading system:

Activities	Quantity	Effects on Grading	Dates
Homework	1	20%	
Midterm	1	40%	17.11.2022
Final	1	40%	

Grading:

Students who can not achieve at least 40% succes in Homework and Midterm (i.e., at least 24 out of 60, equivalently $(M \cdot 2 + H)/3 \geq 40$ or $(M \cdot 0.40 + H \cdot 0.20) \geq 24$) can not take the Final Exam and receive VF.

Equal Opportunity Policy

Please contact me if you need any academic customization. (Herhangi bir akademik uyarlamaya ihtiyaç duyuyorsanız lütfen benimle iletişime geçiniz)

[1] This schedule is tentative. Depending on the class and/or requests of other related sections, I reserve the right to skip/fast forward certain topics in order to pay more attention to certain others.