Discrete Mathematics I. – fall semester 2013/14

1st year majors in Mathematics, Economic and Financial Mathematics, Actuarial Mathematics

Course Webpage: `http://thales.doa.fmph.uniba.sk/niepel/DM/logic_sets.html`

Lecturer: Martin Niepel
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Office hours: M 131, Tuesday 14:00-15:00, Wednesday 14:00-15:00
Problem sessions: Martin Niepel, Kristína Kováčiková

Course outline

The course serves as an introduction to mathematical logic and set theory. During the first half devoted to logic we introduce symbolic language and formulae of propositional logic, methods of their evaluation, tautologies, formal system of axioms and inference in propositional logic, language and basics of formulae with predicates and quantifiers.

Topics in set theory will include: notion of a set, set operations, relations on sets, cardinality of sets, mappings between sets, finiteness and infinity, countability and uncountability, partially oredered sets, well ordered sets, etc.

Recommended literature

xxx
xxx
xxx

Grading scheme

Student can attain 50 points during semester for homeworks and two midterms.

Final written exam is worth 50 points. For passing the course it is necessary to obtain at least 15 points from the final exam.

Grades: $A > 85$, $B > 70$, $C > 55$, $D > 45$, $E > 35$.

Homework sets

There will be weekly homework problem sets which will be available at the course webpage. Their purpose is to illustrate covered topics, their completion will be checked during problem sessions (or will be collected). Collaboration on homework is not prohibited, but students should write-up and present solutions on their own. In the case of difficulties with problems try to speak to your classmates or attend office hours.

Exam rules

Absolutely no cheating during exams, use of electronic devices (e.g. mobile phones) is prohibited.