

MA 295 Set Theory (3 Cr.)

COURSE DESCRIPTION

Prerequisite: Permission of Instructor

Description

The course will be an introduction to Boolean algebra and to Cantorian set theory. The course is also intended to be a general introduction to mathematical thought, and various ideas will be examined carefully, such as the axiomatic method, generality and abstraction and their role in applications, and the role of examples and counter-examples in the development of theory. The idea of proof in mathematics will be emphasized heavily. The course will be appropriate for serious students at the MA 115- and 161-level. Nevertheless, there will be plenty to challenge more advanced students who may be interested in Boolean algebra and Cantorian set theory, and such students are welcome to take the course. The course should provide a useful background for students planning to take MA 312 or MA 331, or other advanced math courses or theoretical CS courses.