Module title
Introduction to Elementary Number Theory (virtual course)

Abbreviation
10-M-VHBZth-191-m01

Module coordinator
Dean of Studies Mathematik (Mathematics)

Module offered by
Institute of Mathematics

ECTS
3

Method of grading
Only after succ. compl. of module(s)

(not) successfully completed
--

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

Contents
The course gives a brief introduction to mathematical working techniques (propositional logic, sets, definitions, proofs), introduces the different number domains, discusses elementary divisibility properties of the integers (including modular arithmetics) and introduces continued fractions and their approximation properties.

Intended learning outcomes
The students get acquainted with the mathematical language, apply easy deduction techniques to elementary number theoretic questions, and get a first impression of the multifarious applications.

Courses
(type, number of weekly contact hours, language — if other than German)
Ü (2)

Method of assessment
(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
project (web-based, 15 to 20 hours)
Assessment offered: Once a year, winter semester
Other: E-Learning, Vhb

Allocation of places
--

Additional information
--

Referred to in LPO I
(examination regulations for teaching-degree programmes)
§ 22 II Nr. 3 f

Module appears in
First state examination for the teaching degree Gymnasium Mathematics (2019)