The Department of Mathematics  
2019–20–A term

Course Name  Theory of Numbers
Course Number  201.1.6031
Lecturer  Prof. Fedor Pakovich, <pakovich@bgu.ac.il>, Office 310
Office Hours  [https://www.math.bgu.ac.il/en/teaching/hours](https://www.math.bgu.ac.il/en/teaching/hours)

Requirements and grading

Course topics

Number Theory studies the structure of the integers and the natural numbers. In addition to classical topics (prime numbers, congruences, quadratic residues, etc.) there is an emphasis on algorithmic questions and in particular on applications to cryptography.

- Divisibility and prime numbers
- Congruences
- The multiplicative group of \( \mathbb{Z}/m \)
- Quadratic residues
- Continued fractions
- Algebraic numbers and algebraic integers

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1Information may change during the first two weeks of the term. Please consult the webpage for updates