## **COURSE DETAIL**

3.00

## **SET THEORY Country** Korea, South **Host Institution** Yonsei University Program(s) Yonsei University **UCEAP Course Level Upper Division UCEAP Subject Area(s)** Mathematics **UCEAP Course Number** 105 **UCEAP Course Suffix UCEAP Official Title SET THEORY UCEAP Transcript Title SET THEORY UCEAP Quarter Units** 4.50 **UCEAP Semester Units**

## **Course Description**

Set theory is a beautiful and magical subject stemming from transparent and easy observations leading us to a surprising and somewhat unbelievable logical world on which contemporary mathematics is based. Its controversial and contrasting history attracts our attentions as well. In this beginning course, we focus on set operations, orderings, cardinal and ordinal arithmetics which, as primitive notions, are absolutely necessary in learning almost every subject of mathematics. The course also introduces more mysterious and advanced parts of the subject whose full clarifications can be pursued by interested students in their senior or graduate level courses. We often touch on set theory itself, overview the axiom of foundation, the consistency and independence problems, the theory of large cardinals, descriptive set theory, etc.

## Language(s) of Instruction

**Host Institution Course Number** 

MAT2104

**Host Institution Course Title** 

SET THEORY

**Host Institution Course Details** 

**Host Institution Campus** 

**Host Institution Faculty** 

**Host Institution Degree** 

**Host Institution Department** 

Mathematics

**Course Last Reviewed** 

2021-2022

**Print**