COURSE DETAIL

HISTORY OF MATHEMATICS

Country

Japan

Host Institution Waseda University

Program(s) Waseda University

UCEAP Course Level Upper Division

UCEAP Subject Area(s) History

UCEAP Course Number 121

UCEAP Course Suffix

UCEAP Official Title HISTORY OF MATHEMATICS

UCEAP Transcript Title HISTORY OF MATH

UCEAP Quarter Units 3.00

UCEAP Semester Units 2.00

Course Description

This course explores the origins of various types of deductive argumentation by working through the arguments of proofs in a historical context. The course looks at the sources of different approaches to mathematical demonstrations in many diverse cultures and periods. It focuses on the continuous tradition that began in Greece; was adopted by Arabic and Hebrew scholars and was further cultivated in the Latin west. Finally, the course confronts contemporary challenges to the idea of proof such as the delicate relationship between rigor and intelligibility and the possibility of computer-generated proofs.

Although this is not a mathematics course, enrollees should have some familiarity with mathematics and mathematical ideas. The texts demand careful attention to reasoning but they do not require advanced mathematical training. Although it is important to understand mathematical arguments, one must pay attention to the historical and philosophical aspects of the text. The class will work on several proofs on the board at each class meeting.

Language(s) of Instruction

English

Host Institution Course Number MI314

Host Institution Course Title HISTORY OF MATHEMATICS

Host Institution Campus Waseda University

Host Institution Faculty

Host Institution Degree

Host Institution Department SILS - Information Science