COURSE DETAIL

THE SCIENCE OF WESTERN MUSIC
Country Korea, South
Host Institution Korea University
Program(s) Korea University
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Physics
UCEAP Course Number 13
UCEAP Course Suffix
UCEAP Official Title THE SCIENCE OF WESTERN MUSIC
UCEAP Transcript Title SCI WESTERN MUSIC
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course studies the scientific aspects of Western (or European) music particularly focusing on its mathematical and physical aspects. The first half of the course reviews the history of European musical scales since Pythagoras, and thereby discusses how mathematics played important roles in their development. The course also covers the concept of harmony as it evolved through the intimate relations between science and music until the Renaissance.

The second half of the course studies the physics of vibrational motions and sound waves using high-school level mathematics. Based on these, the course exposes how various musical instruments produce their characteristic sounds. The course also provides opportunities to learn how scientific and technological advances have influenced European classical music.

Language(s) of Instruction
English

Host Institution Course Number
GEQR074

Host Institution Course Title
SCIENTIFIC UNDERSTANDING OF WESTERN MUSIC

Host Institution Course Details
https://infodepot.korea.ac.kr/lecture1/lecsubjectPlanView.jsp?year=2023&term=2R...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Physics

Course Last Reviewed
2023-2024

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