

COURSE DETAIL

DIFFERENTIAL GEOMETRY 2

Country

Korea, South

Host Institution

Yonsei University

Program(s)

Yonsei University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

100

UCEAP Course Suffix

B

UCEAP Official Title

DIFFERENTIAL GEOMETRY 2

UCEAP Transcript Title

DIFFERENTL GEOMETRY

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course studies geometric properties of curves and surfaces in the 3-dimensional Euclidean space, applying tools of multivariable, and vector calculus. Topics include covariant derivatives, frame fields, connection forms, structural equations, normal curvatures, gaussian curvature, computational techniques, special curves in a surface, form computation, isometries and local isometries, intrinsic geometry, orthogonal coordinates, integration and orientation, total curvature, geodesics, the gauss-bonnet, application of gauss-bonnet theorem.

Language(s) of Instruction

English

Host Institution Course Number

MAT3102

Host Institution Course Title

DIFFERENTIAL GEOMETRY 2

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

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