

COURSE DETAIL

MATHEMATICAL METHODS IN PSYCHOLOGY

Country

Taiwan

Host Institution

National Taiwan University

Program(s)

National Taiwan University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Psychology

UCEAP Course Number

111

UCEAP Course Suffix**UCEAP Official Title**

MATHEMATICAL METHODS IN PSYCHOLOGY

UCEAP Transcript Title

MATH METHODS PSYCH

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course introduces fundamental modeling principles in psychology, with a particular focus on model testing using the maximum likelihood approach. It covers the formulation of model likelihoods and the application of computational techniques to maximize them. The course demonstrates the use of models through examples primarily drawn from perception and cognition. Topics include threshold models, signal detection theory, multinomial processing tree models, reinforcement learning models, and more.

Language(s) of Instruction

Chinese

Host Institution Course Number

Psy5028

Host Institution Course Title

MATHEMATICAL METHODS IN PSYCHOLOGY

Host Institution Course Details

https://nol.ntu.edu.tw/nol/coursesearch/print_table.php?course_id=227%20U0920&c...

Host Institution Campus

Host Institution Faculty

Science

Host Institution Degree

Host Institution Department

Psychology

Course Last Reviewed

2025-2026

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