Cluster	Subject Title	Instructor	Credit	Semester
K-P	Cognitive Science of Human Communication	Hideki KOZIMA	2	Summer 2026

Subject Description

To engage in cutting-edge research in human social development in the context of education and therapy, students are required to cultivate a deep understanding of the human body, brain, and cognition from a cognitive science perspective. In this interdisciplinary course of lectures, students learn to weave an integrated understanding of human nature from topics of cognitive sciences for understanding the humanities, such as brain science, cognitive psychology, developmental psychology, and evolutionary psychology. In the final part of the course, students examine research conducted by the lecturer on the use of robots for autism therapy. Through these activities, students are expected to be able to foresee their future studies and research in the field.

Objective

Engaging in the course of lectures, the participating students will be able to
(1) understand key concepts of human social development in education and therapy from a cognitive science perspective,
(2) design and explain effective, feasible approaches for future education and therapy, in the context of research and social practices, and
(3) foster curiosity and motivation to create innovative practices in future research.

Leaning Method

The course consists of lectures to acquire interdisciplinary knowledge of the subject, accompanied by discussions to deepen, express, and share ideas. The lectures and discussions use English.

Content

Introduction
(1) Introduction to Cognitive Science of Communication

Part I
(2) Body and brain: Umwelt and affordances
(3) Body and brain: Brain structure and functions
(4) Cognitive development: Towards social learning theories
(5) Cognitive development: Activity theory and natural pedagogy

Part II
(6) Development of communication: Joint attention
(7) Development of communication: Theory of mind
(8) Development of communication: Emulation and imitation
(9) Language development: Symbol and grammar acquisition

(10) Language development: Cultural transmission and creation
(11) Language development: Imagination and creation in pretend play

Part III
(12) Autism studies: Autism spectrum disorder
(13) Acquisition of Language and Culture I: Vocabulary Learning (Kozima)
(14) Acquisition of Language and Culture I: Grammar and Culture Acquisition (Kozima)
(15) Research Introduction: Using Robots for Autism Therapy (Kozima)

Note: Lecture details are subject to change.

Requirement
Students should bring their laptops or tablets to access the online course materials.
Evaluation
Engagement in the discussions - 50% Individual final essay (500 words) - 50%
Textbook and reference (please indicate which are to be provided by instructor and which students need to find by themselves)
No textbook is used. References (e.g., academic papers and books) will be provided in the online course materials.
Pre-course reading and preparation (if any)
No particular preparation is required.