List of classes in Graduate School of Science, Osaka City University

Master's Course

<Division of Mathematics & Physics>

Disciplinary Classes

(Mathematical Structure Theories)

Topics in Mathematical Structures 1, 2, 3, 4

Advanced Algebra I, II, III, IV

Advanced Geometry I, II, III, IV

Selected Topics in Algebraic Structures I, II, III, IV

Selected Topics in Geometric Structures I, II, III, IV

Exercises in Mathematical Structures

(Mathematical Analysis)

Mathematical Analysis 1, 2, 3, 4

Advanced Analysis I, II, III, IV

Introduction to Mathematics I. II

Selected Topics in Analysis I, II, III, IV

Exercises in Mathematical Analysis

(Fundamental Physics)

Quantum Field Theory

Theory of Elementary Particles

Mathematical Methods of Physics

Plasma Physics

Fluid Mechanics

Relativistic Theory of Gravitation

Relativistic Astrophysics

Nuclear Physics I, II

Selected Topics in Fundamental Physics IA, IB, IIA, IIB, III

Exercises in Fundamental Physics

(Astroparticle and High Energy Physics)

High Energy Physics I, II

Cosmic Ray Physics I, II

Experimental Physics of Cosmic-rays and Elementary Particles I, II

Experimental Physics of Gravitational Waves

Astrophysics

Selected Topics in Astro and High Energy Physics I, II, III

Selected Topics in Particle Physics I, II, III

Exercises in Astro and High Energy Physics

(Condensed-Matter Physics)

Condensed Matter Physics I, II

Quantum Statistical Physics I, II

Low Temperature Physics

Optical Properties of Condensed Matter

Atomic Physics

Low Temperature Solid State Physics

Selected Topics in Solid State Physics IA, IB, IIA, IIB

Selected Topics in Condensed Matter Physics IA, IB, IIA, IIB

Exercises in Condensed Matter Physics

Interdisciplinary Classes

Mathematical Sciences A, B, C

Selected Topics in Mathematical Sciences I, II

Mathematical Physics I, II, III, IV

Computational Science

Selected Topics in Mathematical Physics I, II, III

International Advanced Research Course for Master's Thesis of Science 1, 2

Special Research Class

Advanced Research Course for Master's Thesis of Science

<Division of Molecular Materials Science>

Disciplinary Classes

(Foundational Classes)

Core Organic Chemistry

Core Inorganic Chemistry

Core Physical Chemistry

(Fundamental Classes)

Creative Molecular Science

Functional Molecular Science

(Creative Molecular Science)

Creative Advanced Organic Chemistry I, II

Creative Advanced Inorganic Chemistry I, II

Creative Advanced Physical Chemistry I, II

Creative Advanced Molecular Science

Exercises in Creative Molecular Science

(Functional Molecular Science)

Functional Advanced Organic Chemistry I, II

Functional Advanced Inorganic Chemistry I, II

Functional Advanced Physical Chemistry I, II

Functional Advanced Biophysical Chemistry I, II

Functional Advanced Molecular Science

Exercises in Functional Molecular Science

(Special Lectures)

Selected Topics in Creative Organic Chemistry 1, 2

Selected Topics in Creative Inorganic Chemistry 1, 2

Selected Topics in Creative Physical Chemistry 1, 2

Selected Topics in Functional Organic Chemistry 1,2

Selected Topics in Functional Inorganic Chemistry 1, 2

Selected Topics in Functional Physical Chemistry 1, 2

Selected Topics in Exploring Molecular Chemistry 1, 2

Selected Topics in Integrated Molecular Chemistry 1 2

(Interdisciplinary Classes)

International Seminar

International Advanced Research Course for Master's Thesis of Science 1, 2

Special Research Classes

Advanced Research Course for Master's Thesis of Science

Graduate School Common Classes

Advanced Technology and Science in Chemical Industry

<Division of Biology & Geosciences>

Disciplinary Classes

(Science of Biomolecules)

Advanced Metabolic Biochemistry

Advanced Microbiological Chemistry I, II

Advanced Enzyme Chemistry

Advanced Biology of Functional Proteins I, II

Selected Topics in Sciences of Biomolecules I, II

Exercises in Science of Biomolecules

(Functional Biosciences)

Advanced Biology of Plant Functions I, II

Advanced Animal Development I, II

Advanced Molecular Cell Biology I, II

Selected Topics in Sciences of Molecular Biofunctions I, II

Exercises in Molecular Biofunctions

(Functional Biology of Natural History)

Advanced Socio-ecology I, II

Advanced Information Biology I, II

Advanced Genetics of Plant Evolution

Selected Topics in Functional Biology of Natural History I, II

Exercises in Functional Biology of Natural History

(Environmental Geosciences)

Advanced Natural History of Anthropogene II

Advanced Lecture on Exploration Geophysics

Urban Geology

Geoinformatics

Advanced Geoinformatics

Advanced Spatial Information Science

Selected Topics in Environmental Geosciences I, II, III, IV

Exercises in Environmental Geosciences

(Earth Evolution Sciences)

Advanced Earth's Material Science I, II

Special Lecture in Petrology I, II

Advanced Historical Geology

Selected Topics in Earth Evolution Sciences I, II, III, IV

Exercises in Earth Evolution Sciences

Interdisciplinary Classes

Functional Ecology

Advanced Functional Ecology

Symbiosis between Nature and Humankind

Selected Topics in Global Change of Bio-environment I, II, III

Selected Topics of Advanced Biology

Advanced Natural History of Anthropogene I

Earth Evolution System

International Advanced Research Course for Master's Thesis of Science 1, 2

Special Research Classes

Advanced Research Course for Master's Thesis of Science

Doctoral Course

Division of Mathematics & Physics

Seminar in Mathematical Structures

Seminar in Mathematical Analysis

Seminar in Fundamental Physics

Seminar in Astroparticle and High Energy Physics

Seminar in Condensed Matter Physics

International Advanced Research Course 1, 2, 3

Advanced Research Course for Doctoral Thesis of Science

Division of Molecular Materials Science

Seminar in Creative Molecular Science

Seminar in Functional Molecular Science

Leadership Training Program

Academic Exchange Study

Interdisciplinary Planner Training Program

International Advanced Research Course for Doctoral Thesis of Science 1, 2, 3

Advanced Research Course for Doctoral Thesis of Science

Division of Biology & Geosciences

Seminar in Science of Biomolecules

Seminar in Functional Biosciences

Seminar in Functional Biology of Natura History

Seminar in Environmental Geosciences

Seminar in Earth Evolution Sciences

International Advanced Research Course for Doctoral Thesis of Science 1, 2, 3

Advanced Research Course for Doctoral Thesis of Science