



SDU courses to be completed by students before transferring to ANU under the 3+1+1 articulation model

选择3+1+1项目学生需完成的 山东大学课程

| | |
|---|---|
| MATHEMATICS AND APPLIED MATHEMATICS MAJOR | 2 |
| 数学与应用数学专业 | 2 |
| APPLIED PHYSICS MAJOR..... | 4 |
| 物理专业 | 4 |
| APPLIED CHEMISTRY MAJOR..... | 6 |
| 应用化学专业 | 6 |
| BIOLOGICAL SCIENCE MAJOR | 8 |
| 生物科学专业 | 8 |

MATHEMATICS AND APPLIED MATHEMATICS MAJOR

数学与应用数学专业

| SDU Course code 山东大学课程代 码 | SDU Course name 山东大学课程名称 | SDU credits 山东大学学 分 |
|---------------------------------|--|---------------------------|
| 27021010 | Mathematical Analysis (1) 数学分析 (1) | 5 |
| 27021020 | Advanced Algebra (1) 高等代数 (1) | 3.5 |
| 27021030 | Analytical Geometry 解析几何 | 3.5 |
| 27025022 | Freestyle Science (ANU-taught) 科学入门 (ANU授课) | 2 |
| 27021040 | Mathematical Analysis (2) 数学分析 (2) | 6 |
| 27021050 | Advanced Algebra (2) 高等代数 (2) | 6 |
| 27021002 | Mathematical Abstraction 1 (ANU-taught) 数学抽象 1 (ANU授课) | 2 |
| 27021012 | Mathematical Abstraction 2 (ANU-taught) 数学抽象 2 (ANU授课) | 2 |
| 27021080 | Mathematical Analysis (3) 数学分析 (3) | 6 |
| 28320010 | College Physics I (1) 大学物理 I (1) | 4 |
| 28320030 | College Physics Experiment I (1) 大学物理实验 I (1) | 1 |
| 27031460 | Ordinary Differential Equations 常微分方程 | 4 |
| 27031120 | Function of Complex Variable 复变函数 | 4 |
| 27031002 | Classical Mechanics 1 (ANU-taught) 经典力学 (ANU授课) | 2 |
| 28320020 | College Physics I (2) 大学物理 I (2) | 4 |
| 28320040 | College Physics Experiment I (2) 大学物理实验 I (2) | 1 |
| 27021022 | Ordinary Differential Equation Modelling (ANU-taught) 常微分方程模型 (ANU授课) | 2 |
| 27031130 | Real Function Theory 实变函数 | 4 |

| | | |
|----------|---|---|
| 27031140 | Probability Theory 概率论 | 4 |
| 27031012 | Classical Mechanics 2 (ANU-taught) 经典力学 (ANU授课) | 2 |
| 27021032 | Partial Differential Equation Modelling (ANU-taught) 偏微分方程模型 (ANU授课) | 2 |
| 27031150 | Functional Analysis 泛函分析 | 4 |
| 27031160 | Partial Differential Equations 偏微分方程 | 4 |
| 27031170 | Abstract Algebra 抽象代数 | 3 |
| 27031180 | Topology 拓扑学 | 4 |
| 27031022 | Advanced Analysis 1 (ANU-taught) 高等分析 1 (ANU授课) | 2 |

APPLIED PHYSICS MAJOR

物理专业

| SDU Course code 山东大学课程代 码 | SDU Course name 山东大学课程名称 | SDU credits 山东大学学 分 |
|---------------------------------|--|---------------------------|
| 28220100 | Advanced Mathematics I (1) 高等数学 I (1) | 5 |
| 27023030 | Fundamental Physics Experiment (1) 基础物理实验 (1) | 1.5 |
| 27025022 | Freestyle Science (ANU-taught) 科学入门 (ANU授课) | 2 |
| 27023020 | Mechanics 力学 | 3 |
| 27021070 | Electromagnetics 电磁学 | 3 |
| 28220110 | Advanced Mathematics I (2) 高等数学1 (2) | 5 |
| 27031100 | Fundamental Physics Experiment (2) 基础物理实验 (2) | 2 |
| 27021002 | Mathematical Abstraction 1 (ANU-taught) 数学抽象1 (ANU授课) | 2 |
| 27021090 | Optics 光学 | 3 |
| 27021012 | Mathematical Abstraction 2 (ANU-taught) 数学抽象2 (ANU授课) | 2 |
| 27031002 | Classical Mechanics 1 (ANU-taught) 经典力学1 (ANU授课) | 2 |
| 27031400 | Electrodynamics 电动力学 | 3 |
| 27021022 | Ordinary Differential Equation Modelling (ANU-taught) 常微分方程模型 (ANU授课) | 2 |
| 27031410 | Quantum Mechanics 量子力学 | 4 |
| 27031012 | Classical Mechanics 2 (ANU-taught) 经典力学2 (ANU授课) | 2 |
| 27021032 | Partial Differential Equation Modelling (ANU-taught) | 2 |

| | | |
|----------|--|---|
| | 偏微分方程模型 (ANU授课) | |
| 27032240 | Thermodynamics and Statistic Physics 热力学与统计物理 | 5 |
| 27031052 | Applied Optics (ANU-taught) 应用光学 (ANU授课) | 2 |
| 27031032 | Physics Experimental Lab 1 (ANU-taught) Changed to "Condensed Matter Physics" (27031172) for 2020 cohort 物理实验 1 (ANU授课) 2020级学生改为“凝聚态物理” (27031172) | 2 |
| 27031042 | Physics Experimental Lab 2 (ANU-taught) Changed to "Quantum Technology" (27031182) for 2020 cohort 物理实验 2 (ANU授课) 2020级学生改为“量子技术” (27031182) | 2 |

APPLIED CHEMISTRY MAJOR

应用化学专业

| SDU Course code 山东大学课程代 码 | SDU Course name 山东大学课程名称 | SDU credits 山东大学学 分 |
|---------------------------------|--|---------------------------|
| 28220120 | Advanced Mathematics II (1) 高等数学 II (1) | 4 |
| 27025022 | Freestyle Science (ANU-taught) 科学入门 (ANU授课) | 2 |
| 27035010 | Inorganic Chemistry (1) 无机化学 (1) | 4 |
| 27035020 | Inorganic Chemistry Experiment (1) 无机化学实验 (1) | 1.5 |
| 28220130 | Advanced Mathematics II (2) 高等数学II (2) | 4 |
| 28320050 | College Physics II (1) 大学物理II (1) | 3 |
| 28220070 | Linear Algebra II 线性代数II | 3 |
| 27031030 | Chemical Analysis 化学分析 | 4 |
| 27031040 | Chemical Analysis Experiment 化学分析实验 | 1.5 |
| 27031050 | Inorganic Chemistry (2) 无机化学 (2) | 4 |
| 27031060 | Inorganic Chemistry Experiment (2) 无机化学实验 (2) | 1.5 |
| 28320060 | College Physics II (2) 大学物理II (2) | 3 |
| 27021002 | Mathematical Abstraction 1 (ANU-taught) 数学抽象1 (ANU授课) | 2 |
| 27031580 | Physical Chemistry (1) 物理化学 (1) | 4 |
| 27031590 | Physical Chemistry Experiment (1) 物理化学实验 (1) | 1.5 |
| 27031600 | Instrumental Analysis 仪器分析 | 3 |
| 27031620 | Organic Chemistry (1) 有机化学 (1) | 4 |
| 27031630 | Organic Chemistry Laboratory (1) 有机化学实验 (1) | 1.5 |

| | | |
|----------|---|-----|
| 27031062 | Research Skills in Chemistry (ANU-taught) 化学研究技巧 (ANU授课) | 2 |
| 27031650 | Physical Chemistry (2) 物理化学 (2) | 4 |
| 27031660 | Physical Chemistry Experiment (2) 物理化学实 (2) | 1.5 |
| 27031670 | Organic Chemistry (2) 有机化学 (2) | 4 |
| 27031072 | Organic Chemistry Laboratory (2) (ANU-taught) 有机化学实验 (2) (ANU授课) | 1 |
| 27031082 | Introduction to Spectroscopy (ANU-taught) 光谱学导论 (ANU授课) | 2 |
| 27031690 | Chemistry of Macromolecule 高分子化学 | 3 |
| 27031092 | Inorganic Chemistry - Transition Metals (ANU-taught) 无机化学-过渡金属 (ANU授课) | 2 |
| 27031102 | Environmental Chemistry (ANU-taught) 环境化学 (ANU授课) | 2 |
| 27031720 | Material Chemistry 材料化学 | 3 |
| 27031640 | Structural Chemistry 结构化学 | 4 |
| 27031112 | Inorganic Chemistry - Coordination Complexes (ANU-taught) 无机化学-配位化合物 (ANU授课) | 2 |
| 27031122 | Transition Metals Laboratory (ANU-taught) 过渡金属实验 (ANU授课) | 1 |
| 27031730 | Computational Chemistry 计算化学 | 1 |
| 27031740 | Computational Chemistry Practice 计算化学上机 | 1 |

BIOLOGICAL SCIENCE MAJOR

生物科学专业

| SDU Course code 山东大学课程代 码 | SDU Course name 山东大学课程名称 | SDU credits 山东大学学 分 |
|---------------------------------|--|---------------------------|
| 27021100 | Advanced Algebra (1) 高等代数 (1) | 3 |
| 27032190 | Inorganic and Analytical Chemistry 无机与分析化学 | 3 |
| 27032200 | Inorganic and Analytical Chemistry Experiment 无机与分析化学实验 | 1 |
| 27037030 | Plant Biology 植物生物学 | 3 |
| 27037040 | Plant Biology Experiment (1) 植物生物学实验 (1) | 1 |
| 27025022 | Freestyle Science (ANU-taught) 科学入门 (ANU授课) | 2 |
| 27032210 | Organic Chemistry 有机化学 | 3 |
| 27031080 | Animal Biology 动物生物学 | 3 |
| 27032250 | Animal Biology Experiment 动物生物学实验 | 1 |
| 27032110 | Mathematical Analysis (2) 数学分析 (2) | 4 |
| 27032120 | Advanced Algebra (2) 高等代数 (2) | 4 |
| 27021002 | Mathematical Abstraction 1 (ANU-taught) 数学抽象1 (ANU授课) | 2 |
| 28220020 | Probability and Mathematical Statistics II 概率论与数理统计 II | 3 |
| 27031840 | Biochemistry (1) 生物化学 (1) | 3 |
| 27031850 | Biochemistry Experiment (1) 生物化学实验 (1) | 1 |
| 27032130 | Mathematical Analysis (3) 数学分析 (3) | 4 |
| 27031900 | Physical Chemistry 物理化学 | 2 |
| 27031970 | Physical Chemistry Experiment 物理化学实验 | 1 |

| | | |
|----------|--|-----|
| 27021022 | Ordinary Differential Equation Modelling (ANU-taught) 常微分方程模型 (ANU授课) | 2 |
| 27031132 | Experimental Design and Analysis in Biology (ANU-taught) 生物学实验设计与分析 (ANU授课) | 2 |
| 27031142 | Biological Statistical Inference (ANU-taught) 生物统计推断 (ANU授课) | 2 |
| 27031830 | Biochemistry (2) 生物化学 (2) | 3 |
| 27031910 | Biochemistry Experiment (2) 生物化学实验 (2) | 1 |
| 27031920 | Cell Biology 细胞生物学 | 3 |
| 27032140 | Cell Biology Experiment 细胞生物学实验 | 1 |
| 27021032 | Partial Differential Equation Modelling (ANU-taught) 偏微分方程模型 (ANU授课) | 2 |
| 27031192 | Theoretical and Applied Genetics (ANU-taught) 遗传学理论与实践 (ANU授课) | 2 |
| 27032090 | Genetics 遗传学 | 2 |
| 27032100 | Genetics Experiment 遗传学实验 | 1 |
| 27032160 | Ecology 生态学 | 2 |
| 27031890 | Ecology Experiment 生态学实验 | 1 |
| 27031162 | Evolution (ANU-taught) 生物进化论 (ANU授课) | 2 |
| 27031940 | Molecular Biology 分子生物学 | 3 |
| 27032170 | Molecular Biology Experiment 分子生物学实验 | 1 |
| 27032070 | Bioinformatics 生物信息学 | 2 |
| 27032080 | Bioinformatics Experiment 生物信息学上机 | 0.5 |