ENVIRONMENTAL STUDIES

San Jacinto Campus

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Menifee Valley Campus

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Degree(s)

Transfer:

A.S. in Environmental Studies ¹⁶⁷⁶⁵ AS.ENVS.OPTB of AS.ENVS.OPTC (with Transfer Emphasis using General Education Requirements Option B or C)

See Also:

A.A. in Liberal Arts - Mathematics & Science Emphasis

Non-Transfer:

None

See:

A.S. in Science

A.S. in Horticulture/ Turf & Landscape Management

A.S. in Water Technology

Certificate(s)

None

Employment Concentration Certificate(s) None

PROGRAM DESCRIPTION

The Environmental Studies transfer and non-transfer programs draw on a multi-disciplinary curriculum that emphasizes the impact of human civilizations on environmental systems. The disciplines represented draw from the physical, life and social sciences as well as the humanities. Environmental science is largely issues-based and relies heavily on the critical thinking skills necessary to understand contemporary issues and propose meaningful solutions to complex problems. Successful completion of the degree requirements entails a broad scientific background, which provides a foundation for continued academic and career success.

CAREER OPPORTUNITIES

For any BA/BS careers, please see your transfer institution.

TRANSFER PREPARATION

MSJC offers a range of course work to prepare students to transfer to four-year colleges and universities. All four-year institutions prescribe their own standards for course evaluation and admissions. Prospective transfer students are advised to research careers, degrees and majors in the Career/Transfer Center, access www.assist.org, review the MSJC catalog and meet with a counselor to expedite their transfer plan.

LEARNING OUTCOMES

- Explain how scientific knowledge is obtained and verified.
- Evaluate the cycling of matter and the flow of energy in environmental systems.
- Achieve basic environmental literacy.
- Think critically about the environmental issues by drawing on an understanding of scientific principles.
- Explore the ethical and social considerations inherent in environmental science.
- Apply the most current environmental discoveries and regulations to contemporary situations.

DEGREE

An Associate in Science (A.S.), degree in Environmental Studies prepares students for transfer to four-year colleges offering a Bachelor of Science (BS) in Environmental Studies or related fields. The major requirements for an A.S. in Environmental Studies can be met by completing the pattern described plus all MSJC General Education Option B (CSU-GE breadth) and/or Option C (IGETC) requirements.

MSJC Core Requirements (17 units)

| | requirements (27 minus) | | | | | |
|-----------------------------|-------------------------------------|---------|--|--|--|--|
| CHEM-101 | General Chemistry I | 5 units | | | | |
| CHEM-102 | General Chemistry II | 5 units | | | | |
| ENVS-101 | Environmental Science | 3 units | | | | |
| or | | | | | | |
| ENVS-101H | Honors Environmental Science | 3 units | | | | |
| MATH-110 | ATH-110 Pre-Calculus (or higher) | | | | | |
| Elective Courses (12 units) | | | | | | |
| ANTH-101 | Physical Anthropology | 3 units | | | | |
| or | | | | | | |
| ANTH-101H | Honors Physical Anthropology | 3 units | | | | |
| ANTH-102 | Cultural Anthropology | 3 units | | | | |
| or | | | | | | |
| ANTH-102H | Honors Cultural Anthropology | 3 units | | | | |
| BIOL-116 | Natural History and Biodiversity of | | | | | |
| | California | 4 units | | | | |
| BIOL-117 | Conservation Biology | 3 units | | | | |
| BIOL-130 | BIOL-130 Marine Biology | | | | | |
| BIOL-140 Ecology | | 4 units | | | | |



| BIOL-144 or | Plant Biology | 4 units | or | Honors Principles of Sociology | 3 units |
|----------------|---|----------|-----------------------|--|-------------|
| BIOL-144H | Honors Plant Biology | 4 units | | 1 | |
| BIOL-11111 | Biodiversity | 3 units | Water and | Soil Technologies & Environmenta | al |
| BIOL-150 | General Biology I | 4 units | _ | g Emphasis | |
| or | General Diology 1 | 1 dilits | | is is not intended to transfer. It is geare | |
| BIOL-150H | Honors General Biology I | 4 units | | nding to pursue careers in industrial envi water or soil quality analysis, envi | |
| BIOL-151 | General Biology II | 4 units | | or agricultural, fire, or wastewater t | |
| or | 23 | | fields. Empl | nasis is placed on obtaining hands-on tr | aining for |
| BIOL-151H | Honors General Biology II | 4 units | students at w | vastewater treatment plants, water quali | ty analysis |
| BIOL-201 | Biostatistics | 3 units | industries, ar | nd turf management companies. | |
| CHEM-112 | Organic Chemistry I | 5 units | Water and | Soil Technologies & Environmenta | al |
| CHEM-113 | Organic Chemistry II | 5 units | Engineerin | g Emphasis Major Electives | |
| ECON-201 | Principles of Macroeconomics | 3 units | | Cultural Anthropology | 3 units |
| or | 1 | | or | 1 0/ | |
| ECON-201H | Honors Principles of Macroeconomics | 3 units | ANTH-102H | I Honors Cultural Anthropology | 3 units |
| ECON-202 | Principles of Microeconomics | 3 units | BIOL-115 | Topics in Biology | 4 units |
| or | - | | or | | |
| ECON-202F | I Honors Principles of Microeconomics | 3 units | BIOL-115H | Honors Topics in Biology | 4 units |
| ECON-203 | Introduction to Environmental | | BIOL-125 | Microbiology | 5 units |
| | Economics | 3 units | | Wherobiology |) units |
| ENVS-100 | Humans and Scientific Inquiry | 3 units | or BIOL-125H | Honors Microbiology | 5 units |
| ENVS-102 | Environmental Science Laboratory | 1 unit | ECON-203 | Introduction to Environmental |) units |
| or | | | ECON-203 | Economics | 3 units |
| | Honors Environmental Science Laborator | • | ENGR-154 | Computer Aided Drafting I | 3 units |
| ENVS-110 | Natural Resources | 4 units | ENGR-164 | Plane Surveying I | 4 units |
| ENVS-190 | Watershed Resource Management | 4 units | ENVS-190 | Watershed Resource Management | 4 units |
| GEOG-101 | Physical Geography | 3 units | GEOG-101 | Physical Geography | 3 units |
| GEOG-102 | Cultural Geography | 3 units | GEOG-101 GEOG-102 | . 61. | 3 units |
| GEOG-104 | Physical Geography Lab | 1 unit | GEOG-102 GEOG-104 | Cultural Geography | - |
| GEOG-105 | Map Interpretation and Spatial Analysis | 3 units | | Physical Geography Lab | 1 unit |
| GEOG-115 | Introduction to Geographic Information Science | 3 units | GEOG-115 | Introduction to Geographic Information Science | 3 units |
| GEOG-120 | Intermediate Geographic Information | 3 units | GEOL-100 | Physical Geology | 4 units |
| GLOG-120 | Science | 3 units | GEOL-100 GEOL-103 | Environmental Geology | 3 units |
| GEOL-100 | Physical Geology | 4 units | GEOL-105 GEOL-105 | Historical Geology | 4 units |
| GEOL-110 | Oceanography | 4 units | GEOL-109 | Geology of National Parks | 3 units |
| MATH-135 | Calculus for Social Science and Business | 3 units | GEOL-10) | Oceanography | 4 units |
| MATH-140 | Introduction to Statistics | 3 units | HORT-101 | Horticulture Science | 3 units |
| PHIL-105 | Introduction to Ethics | 3 units | HORT-106 | | 3 units |
| PHY-201 | Mechanics and Wave Motion | 4 units | 11OK1-100 | Pesticide Law & Regulations- Turf & Landscape | 3 units |
| PHY-202 | Electricity and Magnetism | 4 units | HORT-107 | Arboriculture | 3 units |
| or | , | | MATH-140 | Introduction to Statistics | 3 units |
| PHY-202H | Honors Electricity and Magnetism | 4 units | MATH-215 | Differential Equations | 4 units |
| PS-101 | Introduction to American Government ar | nd | PHIL-103 | Logic | 3 units |
| | Politics | 3 units | | Logic | Junts |
| or | | | or DHII 103H | Hanars Logic | 2 110140 |
| PS-101H | Honors Introduction to American | a : | PHIL-103H PHIL-104 | Honors Logic World Policions | 3 units |
| DC 102 | Government and Politics | 3 units | | World Religions | 3 units |
| PS-102 | Comparative Politics and Government | 3 units | PHIL-105 | Introduction to Ethics | 3 units |
| or DC 102LL | | | PS-102 | Comparative Politics and Government | 3 units |
| PS-102H | Honors Comparative Politics and Government | 3 units | Of DC 10211 | II C . D | |
| SOCI-101 | Principles of Sociology | 3 units | PS-102H | Honors Comparative Politics and Government | 3 units |
| JOC1-101 | Timopies of Sociology | Juiits | | Government | Juills |



| SOCI-101 | Principles of Sociology | 3 units |
|-----------|--|---------|
| or | | |
| SOCI-101H | Honors Principles of Sociology | 3 units |
| WATR-100 | Introduction to Water/Wastewater | |
| | Operations | 1 unit |
| WATR-103 | Water Treatment Plant Operations I & II | 3 units |
| WATR-105 | Water Treatment Plant Operations | |
| | III, IV, & V | 3 units |
| WATR-120 | Wastewater Treatment Plant Operations | |
| | I & II | 3 units |
| WATR-122 | Wastewater Plant Operations III, IV, & V | 3 units |
| WATR-125 | Test Procedures for Water and Wastewater | 3 units |
| WATR-130 | Environmental Laws and Regulations | 3 units |

