SUSTAINABILITY MINOR

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http://sust.uark.edu/minor/index.php
Anyone undergraduate student has access to the Sustainability Minor regardless of degree program.
Each student must complete the two required classes (SUST 1103 and SUST 2103) and 9 credits of elective classes. Elective classes are categorized into four themes which are then broken into two tiers. The four themes are Social Systems, Natural Systems, Build Systems, and Managed Systems. Tier 1 courses are those with dominant sustainability content or fundamental principles related to understanding sustainability. Tier 2 courses are those with subordinate sustainability content or associated principles related to understanding sustainability, but with content useful in preparing students with prerequisite knowledge for Tier 1 courses.
Sustainability of Natural Systems Courses

Tier 1

- BENG 4903 Watershed Ecology & Hydrology (CVEG 3213)
- BIOL 3863/BIOL 3861L General Ecology and lab
- General Ecology 7 hours of biological sciences
- CSES 3214 Soil Resources & Nutrient Cycles (CSES 2203 and lab component)
- ENSC 3003 Introduction to Water Science (ENGL 1023 and ENSC 1003 or CHEM 1053 or higher or GEOL 1113 or higher or BIOL 1543)
- ENSC 3103 Plants and Environmental Restoration (CSES 1203 or HORT 2003 or BIOL 1613)
- ENSC 3223/3221L Ecosystem Assessment and lab (BIOL 1543, CSES 2203, ENSC 3003)
- ENSC 3263 Soil and Water Conservation (CSES 2203)
- ENSC 4023 Water Quality (CHEM 1123/1121L)
- ENSC 4263 Environmental Soil Science (CSES 3214)
- GEOG 3003 Conservation of Natural Resources
  There are no pre-requisites for this course

Tier 2

- BIOL 1543/1541L Principles of Biology and lab
- CHEM 1103 University Chemistry I; the lab component, CHEM 1101L, is recommended (MATH 1203 and Drill)
- CHEM 1123/1121L University Chemistry II and lab (MATH 1203, CHEM 1103)
- CSES 2203/2201L Soil Science and lab (CHEM 1103 or CHEM 1073)
- ENSC 1003 Environmental Science
- GEOG 2003 World and Regional Geography
- GEOG 3333 Oceanography (Junior standing)
- GEOG 3383 Principles of Landscape Evolution
- GEOG 4353 Elements of Weather (Junior standing)
- GEOG 4363 Climatology (GEOG 1003 or GEOG 4353)
- GEOL 1113/1111L General Geology and lab (Pre- or corequisite: GEOL 1113)
- GEOL 1133/1131L Environmental Geology and lab (GEOL 1113/GEOL 1111L)
- GEOL 4033 Hydrogeology (MATH 2564, GEOL 3513/GEOL 3511L)
- GEOL 4053 Geomorphology (GEOL 1113 or GEOL 3002)
- GEOL 4063 Principles of Geochemistry (CHEM 1121L and CHEM 1123)
- GEOS 4413 Principles of Remote Sensing (University science course)
- MATH 4163/BIOL4163 Dynamic Models in Biology (MATH 2554; Same as BIOL 4163)
- PHYS 2054 University Physics I (MATH 2554)
- PHYS 2074 Univeristy Physics II (PHYS 2054, Prerequisite or corequisite: MATH 2554)
Sustainability of Managed Systems Courses

Tier 1

- AGEC 3413 Principles of Environmental Economics (*AGEC 1103 or ECON 2023*)
- AGEC 3523 Environmental and Natural Resource Law
- AGED 4003 Issues in Agriculture Junior standing
- CSES 3214 Soil Resources and Nutrient Cycles with lab (*CSES 2203*)
- ECON 3843 Economic Development, Poverty, & the Role of the World Bank and IMF in Low-Income Countries (*ECON 2013 and ECON 2023, or ECON 2143*)
- ENSC 3103 Plants and Environmental Restoration (*CSES 1203 or HORT 2003 or BIOL 1613*)
- ENSC 3223/3221L Ecosystems Assessment and lab (*BIOL 1543, CSES 2203, and ENSC 3003*)
- ENSC 3263 Soil and Water Conservation with lab component (*CSES 2203*)
- ENSC 4023 Water Quality with lab component (*CHEM 1123/CHEM 1121L*)
- ENSC 4263 Environmental Soil Science (*CSES 3214*)
- HORT 3503 Sustainability and Organic Horticulture (suggested but not required: BIOL 1613, CSES 1203, CSES 1003, or HORT 2003)
- WCOB 3023 Sustainability in Business (*Junior standing*)

Tier 2

- AGED 4443 Methods of Technological Change (*Junior standing*)
- AGME 1613 Fundamentals of Agricultural Systems Technology with lab component
- CSES 2012 Organic Crop Production
- CSES 2203/2201L Soil Science with drill (*CHEM 1103 or CHEM 1073*)
- ENSC 1003 Environmental Science
- MGMT 4243 Ethics & Corporate Responsibility (*Junior standing*)
Sustainability of Built Systems Courses

Tier 1

- ARCH 4023H Sustainability and Design Permission of instructor
- CVEG 488V Sustainability in Civil Engineering (CVEG majors)
- GEOG 4383 Hazard Assessment and Risk Policy (Junior standing)
- INEG 4583 Renewable Energy: Green Power Sources (Senior standing)
- MEEG 4453 Industrial Waste and Energy Management (MEEG 4413 or equivalent)
- MEEG 4473 Indoor Environmental Design (MEEG 4413 or equivalent)
- LARC 40?? Sustainable Housing (4th year standing)
- LARC 40?? Alternative Stormwater Management

Tier 2

- GEOG 3543 Geographic Information Science
- GEOG 4063 Urban Geography (Junior standing)
- ARCH 3134 Building Systems: Lighting, Acoustics, and HVAC (ARCH 2124, Corequisite: ARCH 3016)
- LARC 4743 Site Planning in Landscape Architecture
- CVEG 3243 Environmental Engineering with lab component (MATH 3404 and CHEM 1123)
- CVEG 4243 Environmental Engineering Design (CVEG 3243)
- CVEG 4323 Design of Structural Systems (CVEG 4303 and CVEG 4313)
- CSCE 4233 Low Power Digital Systems (CSCE 2123)
Sustainability of Social Systems Courses

**Tier 1**

- AGEC 3523 Environmental and Natural Resource Law
- AGEC 4163 Agriculture and Rural Development (*AGEC 1103 or ECON 2023*)
- COMM 4643 Environmental Communications
- ENGL 4133 Environmental Literature and Nature Writing
- ENSC 3933/PHIL 3113 Environmental Ethics (*ENSC 1003 or PHIL 2003 or PHIL 2103*)
- GEOS 4693 Environmental Justice
- RESM 1023 Recreation and Natural Resources (*RESM 1003*)
- RESM 4023 Outdoor Adventure Leadership
- RSOC 4603/SOCI 4603 Environmental Sociology

**Tier 2**

- ANTH 4143 Ecological Anthropology
- HIST 4773 Environmental History
- CHLP 6553 Environmental Health
- CHLP 4643/5643 Multicultural Health
- SCWK 4093 Human Behavior and Social Environments I (*PSYC 2003, SOCI 2013, SCWK 2133, and SCWK 3193 and either BIOL 1543/1541L, or ANTH 1013/1011L*)
- SCWK 4103 Human Behavior and Social Environments II (*SCWK 4093 and SCWK 4153*)
- SCWK 3193 Human Diversity and Social Work
- SOCI 2033 Social Problems
- SOCI 3193 Race, Class, Gender in the U.S. (*SOCI 2013*)
- SOCI 4013 Special Topics: The City (*SOCI 2013*)
All students participating in the minor in Sustainability must complete a capstone experience focused on service learning, research learning, or internship in sustainability. Student engagement in community service, research, or relevant work on sustainability through a summer internship provides opportunities for students to apply sustainability theories and principles learned from prior coursework toward advancing sustainability across society.

To qualify for the SUST 4103 Capstone Experience course students must have successfully completed SUST 1103, SUST 2103, and 6 hours of elective coursework toward the minor in Sustainability.
**CONTACT INFORMATION**

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