Overview

This project outlines the results of the AASHE STARS report on sustainability related curriculum on the University of Arkansas campus from 2011-2013. Sustainability course identification and sustainability courses by department, as well an analysis of sustainability learning outcomes are outlined below.

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Methodology

Sustainability Course Identification

- **Institution’s definition of Sustainability:** Development which meets the needs of current generations without compromising the ability of future generations to meet their own needs.
- **Methodology:** The Executive Director of the Office for Sustainability and the Sustainability Curriculum Committee distinguished whether sustainability was the sole focus of courses or if they were related to sustainability.
- **Sustainability Course Inventory for the minor can be found at:** [http://sustainability.uark.edu/16966.php](http://sustainability.uark.edu/16966.php)
- **All department courses can be found at:** [http://catalogofstudies.uark.edu/2881.php](http://catalogofstudies.uark.edu/2881.php)

Course Identification
Sustainability Focused Courses

- Number of sustainability-focuses courses offered: 63
- Total number of courses offered: 3490
- Number of years covered by data: One
- Sustainability focused courses make up just over one percent of all courses offered to students.

Table 1. List of Courses Offered

- SUST 1103 - FUNDAMENTALS OF SUSTAINABILITY
- SUST 2103 - APPLICATIONS OF SUSTAINABILITY
- SUST 4103 - CAPSTONE PROJECT IN SUSTAINABILITY
- BIOL 3863/BIOL 3861L General Ecology and lab
- BIOL 480V/BIOL 580V Conservation Genetics
- CSES 3214 Soil Resources & Nutrient Cycles
- ENSC 3003 Introduction to Water Science
- ENSC 3103 Plants and Environmental Restoration
- ENCS 404V Watershed
- GEOG 3003 Conservation of Natural Resources
- ENSC 1003 Environmental Science
- AGEC 3413 Principles of Environmental Economics
- AGEC 3523 Environmental and Natural Resource Law
- BENG 3603 Sustainable Agricultural Methods
- BENG 4663 Sustainable Biosystems
- ECON 3843 Economic Development, Poverty, & the Role of the World Bank and IMF in Low-Income Countries
- ENSC 3223/3221L Ecosystems Assessment and lab
- ENSC 3263 Soil and Water Conservation with lab component
- HORT 3203 Sustainable Landscape Practices
- HORT 3503 Sustainability and Organic Horticulture
- HORT 4503 Sustainable Nursery Management
- WCOB 3023 Sustainability in Business
- CS 2012 Organic Crop Production
- ARCH 303V-H - Sustainability Summer Program 2013
- ARCH 4023H Sustainability and Design Permission of instructor
- CVEG 488V Sustainability in Civil Engineering
- INEG 4583 Renewable Energy: Green Power Sources
- MEEG 4453 Industrial Waste and Energy Management
- LARC 40?? Sustainable Housing
- LARC 40?? Alternative Stormwater Management
- LARC 303V Regional Environmental Planning
- AGEC 4163 Agriculture and Rural Development
- COMM 4463 Environmental Communications
- ENGL 4133 Environmental Literature and Nature Writing
- ENSC 3933/PHIL 3113 Environmental Ethics
- GEOG 4693 Environmental Justice
- RSOC 4603 Environmental Sociology
- Agriculture & the Environment
- Food, Farming & Sustainability
- Agricultural Policy Making and the Impact of the Federal Budget
- Agricultural Perspectives
- Regulated Markets in Agriculture
- Agricultural Water Law
- Agricultural Labor Law
- International Agricultural Trade
- Rural Lands-Rural Livelihoods
- ENDY 5113 Global Change
- ENDY 6013 Environmental Dynamics
- ENDY/ANTH 6033 Society and Environment
- BENG 5933 Environmental and Ecological Risk Assessment
- BENG 5623 Life Cycle Assessment
- MBAD 5241. Ethical Decision Making
- ENTO 4123 Insect Pest Management
- PHYS 1044. Physics for Architects I
- BENG 4933 Sustainable Watershed Engineering
- BIOL 4154 Biology of Global Change
- Geol 360V Special Problems: Sustainable Practices in Panama
- WCOB 410V The Sustainability Mindset
- ENSC 1003 Environmental Science
- ARCH 2132 Environmental Technology I
- ARCH 4154 Environmental Technology II and Building Systems
### Sustainability Related Courses

- Number of sustainability-related courses offered: **68**
- Total number of courses offered: **3490**
- Number of years covered by data: **One**
- The number of sustainability related courses makes up almost 2% of total courses.

**Table 2. List of sustainability related courses offered**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1543/1541L</td>
<td>Principles of Biology and lab</td>
</tr>
<tr>
<td>CHEM 1103</td>
<td>University Chemistry I; the lab component, CHEM 1101L is recommended</td>
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<tr>
<td>CHEM 1123/1121L</td>
<td>University Chemistry II and lab</td>
</tr>
<tr>
<td>CSES 2203/2201L</td>
<td>Soil Science and lab</td>
</tr>
<tr>
<td>GEOG 2003</td>
<td>World and Regional Geography</td>
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<tr>
<td>GEOG 3333</td>
<td>Oceanography</td>
</tr>
<tr>
<td>GEOG 3383</td>
<td>Principles of Landscape Evolution</td>
</tr>
<tr>
<td>GEOG 4353</td>
<td>Elements of Weather</td>
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<tr>
<td>GEOG 4363</td>
<td>Climatology</td>
</tr>
<tr>
<td>GEOL 1113/1111L</td>
<td>General Geology and lab</td>
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<tr>
<td>GEOL 1133/1131L</td>
<td>Environmental Geology and lab</td>
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<tr>
<td>GEOL 4033</td>
<td>Hydrogeology</td>
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<tr>
<td>GEOL 4053</td>
<td>Geomorphology</td>
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<tr>
<td>GEOL 4063</td>
<td>Principles of Geochemistry</td>
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<tr>
<td>GEOS 4413</td>
<td>Principles of Remote Sensing</td>
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<tr>
<td>BIOL 4163</td>
<td>Dynamic Models in Biology</td>
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<tr>
<td>MATH 4163</td>
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<tr>
<td>PHYS 2054 University Physics I</td>
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<tr>
<td>PHYS 2074</td>
<td>University Physics II</td>
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<tr>
<td>AGED 4003</td>
<td>Issues in Agriculture Junior standing</td>
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<tr>
<td>ENSC 4263</td>
<td>Environmental Soil Science</td>
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<tr>
<td>AGED 4443</td>
<td>Methods of Technological Change</td>
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<tr>
<td>AGME 1613</td>
<td>Fundamentals of Agricultural Systems Technology with lab component</td>
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<tr>
<td>MGMT 4243</td>
<td>Ethics &amp; Corporate Responsibility</td>
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<tr>
<td>GEOG 4385</td>
<td>Hazard Assessment and Risk Policy</td>
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<tr>
<td>MEEG 4473</td>
<td>Indoor Environmental Design</td>
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<tr>
<td>GEOG 3543</td>
<td>Geographic Information Science</td>
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<tr>
<td>GEOG 4063</td>
<td>Urban Geography</td>
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<tr>
<td>ARCH 2114</td>
<td>Building Environmental Technology: Passive Systems Buildings</td>
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<tr>
<td>ARCH 3134</td>
<td>Site Planning in Landscape Architecture</td>
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<tr>
<td>CFEG 3243</td>
<td>Environmental Engineering with lab component</td>
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<tr>
<td>CFEG 4243</td>
<td>Environmental Engineering Design</td>
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<td>CFEG 4323</td>
<td>Design of Structural Systems</td>
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<td>CSCE 4233</td>
<td>Low Power Digital Systems</td>
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<td>RESM 1023</td>
<td>Recreation and Natural Resources</td>
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<td>RESM 4023</td>
<td>Outdoor Adventure Leadership</td>
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<tr>
<td>ANTH 4143</td>
<td>Ecological Anthropology</td>
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<tr>
<td>HIST 4773</td>
<td>Environmental History</td>
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<tr>
<td>CHLP 6553</td>
<td>Environmental Health</td>
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<tr>
<td>CHLP 4643/5643</td>
<td>Multicultural Health</td>
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<tr>
<td>SCWK 4093</td>
<td>Human Behavior and Social Environments I</td>
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<tr>
<td>SCWK 4103</td>
<td>Human Behavior and Social Environments II</td>
</tr>
<tr>
<td>SCWK 3193</td>
<td>Human Diversity and Social Work</td>
</tr>
<tr>
<td>SOCI 2033</td>
<td>Social Problems</td>
</tr>
<tr>
<td>SOCI 3193</td>
<td>Race, Class, Gender in the U.S.</td>
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<tr>
<td>SOCI 4013</td>
<td>Special Topics: The City</td>
</tr>
<tr>
<td>TEED 2103</td>
<td>Technology &amp; Society</td>
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<tr>
<td>Introduction to the Law of Food &amp; Agriculture</td>
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<tr>
<td>Food Law &amp; Policy</td>
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<tr>
<td>Food Safety &amp; Litigation</td>
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<tr>
<td>Regulation of Livestock Sales</td>
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<tr>
<td>Federal Farm Policy</td>
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<tr>
<td>Selected Issues in Food Law</td>
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<tr>
<td>Legal Issues in Agricultural &amp; Food Law</td>
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<tr>
<td>Research &amp; Writing in Agricultural &amp; Food Law</td>
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</tr>
<tr>
<td>SOCI 5253</td>
<td>Classical Social Theory</td>
</tr>
<tr>
<td>ENDO/ANTH/GEOS 5053</td>
<td>Quaternary Environments</td>
</tr>
<tr>
<td>ENTO 4053</td>
<td>Insect Ecology</td>
</tr>
<tr>
<td>CIED 5943</td>
<td>Teaching People of Other Culture</td>
</tr>
<tr>
<td>DRAM 4463</td>
<td>African American Theatre History -- 1950 to Present</td>
</tr>
</tbody>
</table>
Figure 1. The number of sustainability related and focused courses.

Sustainability Courses by Department

- Number of departments that offer at least one sustainability related or focused course: 49
- Total number of departments that offer courses: 52
- 94% of departments offer at least one sustainability focused or related course.

Table 3. List of departments that offer sustainability courses

- Department of Accounting
- Department of Ag Econ
  Ag Busn
- Department of Agri
  Education
- Department of Animal
  Science
- Department of Anthropology
- Department of Architecture
- Department of Landscape Arch
- Department of Biol
  Engr
- Department of Biological Sci
- Dept of Biomedical
  Engineering
- Department of Chem &
  Bio Chem
- Department of Chem
  Engr
- Department of Curr &
  Instr
- Department of Communication
- Department of Cmp
  Sci/Cmp Engr
- Department of Crop
  Soil Env Sc
- Continuing Education
- Department of Civil
  Engr
- Department of Drama
- Department of Economics
- Department of Education Reform
- Department of Elec
  Engr
- Department of English
- Department of Entomology
- Department of Food
  Science
- Department of Finance
- Department of Geosciences
Learning Outcomes: 2011-2013

“Consistent with the United Nations Educational, Scientific and Cultural Organization (UNESCO), student learning outcomes are defined as:

Statements of what a learner is expected to know, understand, and be able to demonstrate after completion of a process of learning as well as the specific intellectual and practical skills gained and demonstrated by the successful completion of a unit, course, or program. Learning outcomes, together with assessment criteria, specify the minimum requirements for the award of credit, while grading is based on attainment above or below the minimum requirements for the award of credit. Learning outcomes are distinct from the aims of learning in that they are concerned with the achievements of the learner rather than with the overall intentions of the teacher.”

For this application, learning outcomes are the number of students who have graduated from a program that requires a sustainability course or has a stated learning outcome of sustainability.

This number only includes students with a primary degree in one of said degree programs. Students with double majors or sustainability-related minors were not included to prevent counting students twice.

Almost half (49 percent) of all students graduated from a degree program that has adopted at least one sustainability learning outcome. Majority (64 percent) of these students graduated from baccalaureate degree programs.

- Number of Students who graduated from a degree program that has adopted at least one sustainability learning outcome: 6,755
- Total number of graduates: 13,793
- Percentage of graduates receiving some kind of sustainability learning outcome: 49%
Project Summary

The University of Arkansas offers a wide range of sustainability focused and related courses across almost all academic departments. The number of focused or related courses is relatively low compared to total courses offered. However, as the sustainability minor continues to mature, additional related or focused courses will be added to this list. Additionally, a streamlined way for faculty to demarcate their courses as related or focused would also boost these numbers.