

# SUSTAINABILITY

B.S. & B.A.



Earn a BS or BA in Sustainability with concentration  
in Energy, Agroecology, Policy and Law,  
or Sustainability Management.

Make Your **PASSION** Your Career



STOCKTON | SCHOOL OF NATURAL  
UNIVERSITY SCIENCES & MATHEMATICS

[stockton.edu/sustainability](http://stockton.edu/sustainability)



A degree in **Sustainability** offers the ideal combination of an interdisciplinary education in sustainability with applied training and focused career expertise in a selected professional field.

As one of only a handful of Sustainability degree programs in the nation with a dedicated core curriculum, you'll complete core courses that integrate the key pillars of sustainability: ecology, technology, economics, policy and ethics. Throughout the program, you will receive training in communication, professional writing, systems analysis and problem solving.

Sustainability students select an area of concentration and receive focused, hands-on training in that specialty. You can select from a B.S. or B.A. degree, and choose to focus your studies in key professional areas. B.S. students can concentrate in Energy Science, Agroecology, or Policy; B.A. students can choose a concentration in either Sustainability Policy or Sustainability Management.

Sustainability students benefit from an innovative sustainability laboratory, supplied with cutting-edge technology and the tools used in the industry; an active and diverse campus sustainability farm, research garden and greenhouse that model and test innovations in sustainable agriculture, soil science, and resource management; as well as to leading campus energy technologies including one of the largest geothermal systems in the nation, an innovative aquifer thermal energy system that helps cool campus buildings, as well as over 2,000 acres of pinelands, wetlands, lakes and shoreline that offer unique opportunities for applied learning.

The Sustainability degree offers hands-on training and project-based learning throughout the curriculum. This means you get both a broad education as well as the real-world experience and training that employers demand. With a focus on community engagement and experiential learning, you have the opportunity to take what you learn in the classroom and apply it in communities and businesses across the state. Student teams take on real world challenges, including energy audits of major regional facilities, consulting on green product design, conducting sustainability audits for local small businesses, the incorporation of novel agricultural techniques in regional agriculture, teaming up with regional nonprofits, and many more. Sustainability courses don't limit your education to the classroom.



Make Your **PASSION** Your Career

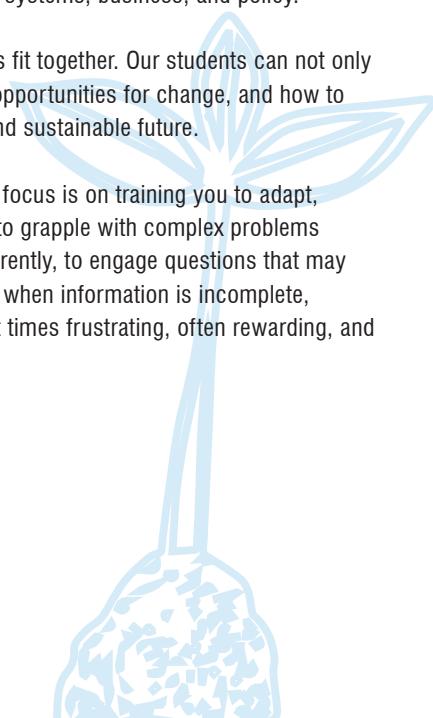


The program maintains Stockton's long-standing commitment to interdisciplinary education and environmental stewardship. Our aim is to empower you to understand different perspectives and integrate divergent interests, to appreciate the world of the scientist and the world of the policymaker and business leader, and to empower you to find creative and new opportunities to help us all do better.

Now, more than ever, there is a critical demand for professionals that fully understand the ecological and social challenges we must address and are thoroughly trained in technology, engineering, science, sustainable food systems, business, and policy.

We need leaders who understand how these pieces fit together. Our students can not only point out where problems exist, but where to find opportunities for change, and how to catalyze movement toward a more just, verdant, and sustainable future.

The world is changing quickly, so our fundamental focus is on training you to adapt, innovate and problem solve. Students are trained to grapple with complex problems and identify innovative new solutions, to think differently, to engage questions that may have no single answers and to address challenges when information is incomplete, contradictory, or changing. The work is exciting, at times frustrating, often rewarding, and profoundly needed.





 Concentrate your Studies on your **PASSION** 

## **B.A./B.S. - Policy**

**The B.A.** requires fewer credits in the major and, allows students to focus in sustainability policy while completing coursework in another field, such as the arts, humanities or social sciences, or pursue an interdisciplinary minor in the School of General Studies. The B.A. option in Policy focuses on developing skills, such as grant-writing, that would be necessary if pursuing a career in the nonprofit sector.

**The B.S.** option allows students to receive greater training and experience in fields such as conservation biology, pollution remediation, resource management, marine conservation, urban planning, and climate policy and resilience planning. A focus in policy can be well complemented by a minor in Economics or Political Science. The B.S. option is preferred by students planning on pursuing careers with government agencies, the for-profit sector, or going to law school.

## **B.A. - Sustainability Management**

This specialization is particularly well suited for students interested in working in business and industry, particularly in sustainability consulting, sustainability marketing, industrial sustainability, health and wellness, sustainability reporting, sustainable product development and related fields. Students in this concentration help to run the Trading Post, a sustainable enterprise on campus that repurposes items that would end up in the waste stream. Sustainability Management students take courses in Business Studies; the concentration should be combined with a minor in Business.

## **B.S. - Energy**

This specialization provides students with the technical and scientific training needed to work in the alternative energy and high-performance building fields. Graduates typically work in energy engineering, green construction, sustainable design, and related fields. Coursework includes considerable applied training in renewable energy systems as well as instruction in building analysis and sustainable design. Students often choose to complement the concentration with a minor in Applied Physics or Chemistry, particularly if they plan to pursue graduate work in the sciences or engineering.

## **B.S. - Agroecology**

This concentration provides a strong science-based background for students hoping to work in sustainable agriculture and community food resources. Students receive extensive, hands-on training on the campus farm, research garden and greenhouses, as well as experience on regional farms and nonprofit organizations focused on food justice. Science coursework in plant science, plant physiology, agroecology, and soil science are combined with training in urban food systems, food justice and conservation policy to offer a comprehensive understanding of local, national and global food systems and opportunities for change. Graduates typically work in local agriculture, education, urban food systems, and nonprofit and development programs related to healthy food production, community development and food justice.

# B.S. Coursework

All B.S. Students must complete these courses:

| Cognates       | Title                     | Credits |
|----------------|---------------------------|---------|
| MATH 2215      | Calculus I                | 5       |
| MATH 2225      | Calculus II               | 5       |
| PHYS 2220/2225 | Physics I +Lab            | 5       |
| PHYS 2230/2235 | Physics II + Lab          | 5       |
| CHEM 2110/2115 | Chemistry 1/Lab           | 5       |
| BIOL 1200/1205 | Cells and Molecules + Lab | 5       |

## Core Program Courses

|             |                                |   |
|-------------|--------------------------------|---|
| SUST 2100   | Environmental Sustainability   | 4 |
| SUST 3300   | Environmental Policy and Law   | 4 |
| ECON 2200   | Ecological Economics           | 4 |
| SUST 3301/5 | Sustainable Technologies + Lab | 5 |

## One ecology course:

|           |                        |     |
|-----------|------------------------|-----|
| SUST 3201 | Marine Conservation OR | 4   |
| ENVL 2200 | Ecological Principles  | 4   |
| SUST 4600 | Senior Synthesis       | 4   |
| SUST 4800 | Senior Internship      | 2-4 |

Each concentration then requires more focused coursework:

## ENERGY CONCENTRATION

|           |                    |   |
|-----------|--------------------|---|
| SUST 3311 | Energy Practicum   | 4 |
| SUST 3312 | Energy Management  | 4 |
| SUST 4720 | Sustainable Design | 4 |

## And two courses such as:

Geographic Information Systems, Energy Planning, Circuits, Electronics  
Green Vehicle Technology, Environmental Planning and Policy

## POLICY CONCENTRATION

|                                     |  |   |
|-------------------------------------|--|---|
| BIOL1400<br>(instead of 1200 above) | Biodiversity and Evolution OR              | 5 |
| SUST 3313                           | Natural Resource Policy and Law OR         |   |
| BIOL 3504                           | Conservation Biology                       | 4 |
| SUST 3325                           | The Global Environment, Health and Justice | 4 |
| SUST 3351                           | Policy Practicum                           | 4 |
| POLS 3150                           | Political Science Research Methods         | 4 |

## And three courses such as:

International Sustainable Development, Business and Sustainability, Food and Agriculture +Lab,  
Environmental Pollution and Regulation, Regional Planning, Urban Environments

## AGROECOLOGY CONCENTRATION

|             |                              |     |
|-------------|------------------------------|-----|
| SUST 3440/5 | Food and Agriculture + Lab   | 5   |
| SUST 3450/5 | Plants and Agroecology + Lab | 5   |
| SUST 3461   | Agroecology Practicum        | 4   |
| SUST 3180   | Plant Physiology             | 4   |
| SUST 3251   | Agricultural Practices       | 2-4 |

## And two courses such as:

Natural Resource Policy and Law, Economic Botany, Plant Ecology  
Environmental Pollution and Regulation, Regional Planning, Soil Science  
Conservation Biology

# **B.A. Coursework**

**Every B.A. student must complete the following courses:**

**Cognates**

|             |                                 |   |
|-------------|---------------------------------|---|
| CHEM 2110/5 | Chemistry 1/Lab                 | 5 |
| PHYS 2110/5 | Physics for Life Sciences + Lab | 5 |
| POLS 2150   | Intro to Political Methodology  | 4 |

**And one of the following:**

- Marine Conservation Ecology, Cells and Molecules + Lab  
Biodiversity and Evolution + Lab, Ecological Principles + Lab

| <b>Core</b> | <b>Cognates Sub-total</b>      | <b>18-19</b> |
|-------------|--------------------------------|--------------|
| SUST 2100   | Environmental Sustainability   | 4            |
| SUST 3300   | Environmental Policy and Law   | 4            |
| ECON 2200   | Ecological Economics           | 4            |
| SUST 3301/5 | Sustainable Technologies + Lab | 5            |
| SUST 4600   | Senior Synthesis               | 4            |
| SUST 4800   | Senior Internship              | 4            |

**Additional coursework required for each concentration includes:**

**POLICY CONCENTRATION**

|           |                                     |   |
|-----------|-------------------------------------|---|
| SUST 3313 | Natural Resource Policy and Law     | 4 |
| SUST 3325 | The Global Envl, Health and Justice | 4 |
| SUST 3351 | Policy Practicum                    | 4 |
| ANTH 2315 | Grant Writing                       | 4 |

**And one course such as:**

- Conservation Biology, International Sustainable Development, Urban Environments  
Food Access and Social Policy, Environmental Psychology  
Environmental Planning and Policy

**SUSTAINABILITY MANAGEMENT CONCENTRATION**

|           |                             |   |
|-----------|-----------------------------|---|
| SUST 3320 | Business and Sustainability | 4 |
| SUST 3351 | Management Practicum        | 4 |
| MGMT 2110 | Introduction to Management  | 4 |

**And two courses such as:**

- Marketing Principles, Sustainability Marketing, Financial Accounting  
Managerial Accounting, Environmental Psychology



**There is a clear need for a new generation of environmental leaders, advocates and professionals for a planet under stress.** Scientific research increasingly tells us that we are compromising the natural systems on which our lives depend. And, there is a growing consensus that the world requires an urgent response from the public and private sectors to avoid the worst potential threats of global ecological degradation. **Stockton's degree in sustainability is designed to help create leaders that can guide that change.**



For more information, contact Dr. Patrick Hossay  
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Stockton is an Equal Opportunity Institution