Sustainability in the Curriculum QEP

Proposal 'Champions'

Jim Kaste, Professor of Geology

Brent Kaup, Professor of Sociology, Director of Environment & Sustainability Program

Amber Hardison, Associate Professor at the Virginia Institute of Marine Sciences

Michael Luchs, Chair of Marketing, Raymond A. Mason School of Business

John Swaddle, Professor of Biology, Faculty Director of the Institute for Integrative Conservation

Other contributors/supporters: Nicholas Balascio, Associate Professor of Geology Alan Braddock, Professor and Chair of Art & Art History Randy Chambers, Professor of Biology and Director of the Keck Environmental Lab Daniel Cristol, Professor of Biology Mara Dicenta, Assistant Professor of Anthropology and Integrative Conservation Dorothy Ibes, Teaching Professor of Environment & Sustainability, Director of Parks & Ecotherapy Research Lab Jenny Kahn, Professor of Anthropology Matthias Leu, Associate Professor of Biology Rowan Lockwood, Professor of Geology Giulia Pacini, Professor and Program Director of French & Francophone Studies Daniel Maliniak, Associate Professor of Government & Public Policy Sarah Stafford, Professor and Chair of Economics Erin Webster, Associate Professor of English

Justification & Goal

Global Risks Report 2024

Top 10 risks

WORLD ECONOMIC FORUM

"Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period."

10 years

1 st	Extreme	weather	events

- 2nd Critical change to Earth systems
- 3rd Biodiversity loss and ecosystem collapse
- 4th Natural resource shortages
- 5th Misinformation and disinformation

Overarching QEP Goal:

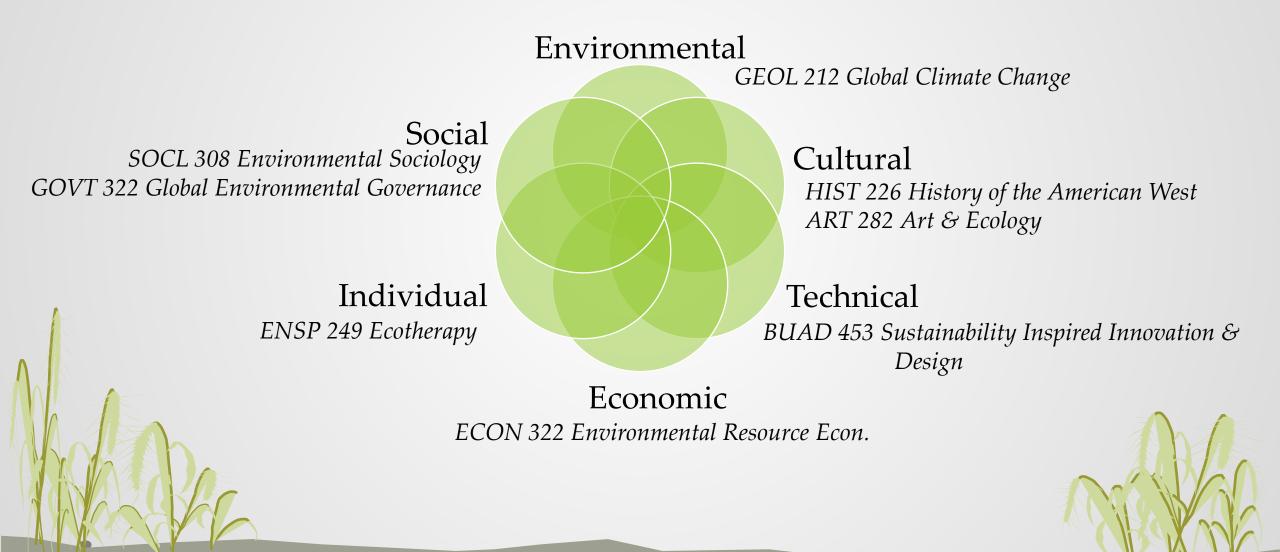
<u>All</u> W&M undergraduate students engage in a 3-credit experience with subject matter significantly focusing on environmental aspects of sustainability



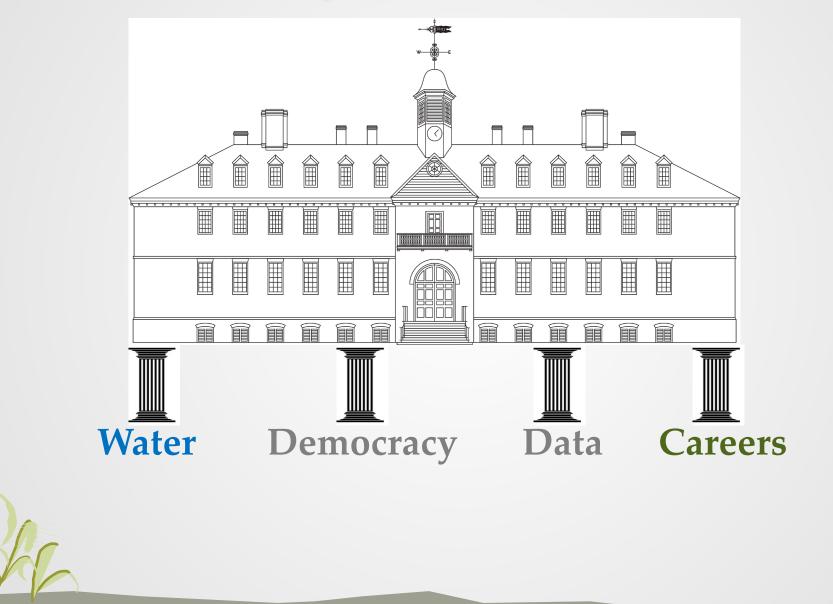
sustainability: meeting the needs of the present without compromising the ability of future generations to meet their own needs



Representative examples of courses offered at W&M with significant connections to environmental aspects of sustainability



Sustainability & the W&M Vision





Sustainability, Water, & Careers

Globally, 1 in 3 suffer water scarcity for >1 month/ year



Artwork by D. Bonazzi to illustrate Partnerships and cooperation.

Growth in demand for green skills is outpacing the increase in supply Between 2022 and 2023

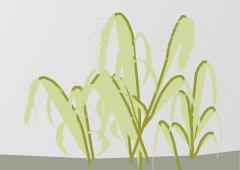
+12.3%

+22.4%

Share of green talent in the workforce

Share of job postings requiring at least one green skill

Analysis of paid job listings, Linkedln 2023



Broad student interest & support at W&M

- Students unanimously approved a 'Green Fees' Program supporting University-wide sustainability efforts (2008)
- Student Assembly created a new 'Secretary of Sustainability' position (2020)
- Student Assembly unanimously passed a resolution supporting a sustainability experience requirement on 2/20/2024

5000 biology total n = -58k4500 (plus 4300 "pre-med" undecided) 4000 computer science 3500 Expressed Interests psychology 3000 business (finance) international relations 2500 "pre-law" 2000 environment & sustainability chemistry 1500 physics 1000 500 Topic of Study (n = 97)

Stated Academic Interests: 2022

Sustainability in the Curriculum QEP

Mechanism

- Use a revised version of the existing **SUST** attribute system
- Any unit can apply for a SUST attribute if ≥30% of the course focuses on an environmental aspect of sustainability
- **Experiential learning option** as a 3-credit independent study using the existing Sustainability Ambassadors program in the Curriculum via ENSP 490 or other relevant units



Sustainability in the Curriculum QEP Goals & Outcomes

- **Produce ethical leaders** who grasp the urgency and opportunity of sustainable practices, setting W&M graduates apart
- Emphasize interdisciplinary problem solving where students value data-driven decision making, diverse stakeholder insights, and a deep humanistic understanding of the cultural dimensions of engaging with nature
- Enhance communication skills
- Increase experiential learning and career exploration in sustainability-related fields

Sustainability in the Curriculum QEP

Assessment Strategies

- **Pre & post course surveys** measuring the ability and confidence to explain basic problems in areas of environmental sustainability
- **Collected course materials**: syllabi, responses to test questions and/or completed assignments or projects evaluated
- Quantify student engagement and interest with course enrollment patterns, declared majors/minors
- Career Exploration
 - Cohen Career Center tracking of attendance at sustainability themed career workshops and fairs
 - o Graduation exit surveys, Alumni Surveys



Sustainability in the Curriculum QEP <u>Resources Required</u>

- Faculty lines in interdisciplinary units (e.g., ENSP, IIC, Marine Sciences) whose role will be to design and teach new SUST courses and advise independent research projects on campus sustainability
- Reprioritization of resources so faculty members can increase sustainability in their research and/or teach sustainability related courses more frequently.
- New hire in the Cohen Career Center whose background/expertise is in sustainability/green careers
- Increased support of Sustainability Office to strengthen management of internships and independent research opportunities
- Office of Institutional Effectiveness and connections with STLI for assessment support



Sustainability in the Curriculum QEP <u>Other benefits</u>

- Demonstratable commitment to W&M Climate Action Plan, carbon neutrality pledge
- Messaging to perspective students, faculty, staff that W&M values sustainability
- Increased interdisciplinary teaching and research across the University
- Improved ranking under the publicly available AASHE STARS Program



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Thank you for your timewe'd be happy to answer questions