University Review of Sustainability Research and Teaching on the UN Sustainable Development Goals (SDGs)



By

Laurelin Haas Sustainable Campus Academics and Partnerships Coordinator

Gabriella Benacquisto Sustainability Fellow Spring 2022-Summer 2022

Juan Alejandro Argüelles Ortiz Sustainability Fellow Spring 2022

Gabrielle Holland Sustainability Fellow Summer 2022



Acknowledgements

<u>Office of Institutional Research</u> Dr. James Hunt, Director of Institutional Research

<u>Office of Research Development</u> Mike Mitchel, Assistant Director Research Strategy and Impact

<u>Sustainable Campus</u> Elizabeth Swiman, Director of Sustainability Gene Cilluffo, Engagement Coordinator Sina Jangjoo, Sustainability Graduate Assistant

<u>University Registrar</u> Jeremy Johnson, Associate Registrar

Additional thanks to individual faculty, staff, and students who provided input through informational interviews and continued to champion the 2030 Agenda through their work.

Table of Contents

Page 1 of 2



| Acknowledgements | 2 |
|---|----|
| Table of Contents | 3 |
| Executive Summary | 5 |
| Introduction | 7 |
| About Florida State University | 10 |
| FSU Rankings | 10 |
| Alignment of the 2030 Agenda with the FSU Mission and Vision | 11 |
| FSU University Review on the UN Sustainable Development Goals (SDGs) | |
| Objectives and Process | 11 |
| Stages of the FSU Process | 12 |
| Methodology | 15 |
| Data Collection for Research and Courses | 15 |
| Key Findings and Next Steps | 17 |
| Key Findings | 17 |
| Recommended Next Steps for FSU | 21 |
| Individual SDG Chapters | 23 |
| Sustainable Development Goal 1: No Poverty | 24 |
| Sustainable Development Goal 2: Zero Hunger | 28 |
| Sustainable Development Goal 3: Good Health & Well-Being | 32 |
| Sustainable Development Goal 4: Quality Education | 36 |
| Sustainable Development Goal 5: Gender Equality | 40 |
| Sustainable Development Goal 6: Clean Water & Sanitation | 44 |
| Sustainable Development Goal 7: Affordable & Clean Energy | 48 |
| Sustainable Development Goal 8: Decent Work and Economic Growth | 52 |
| Sustainable Development Goal 9: Industry, Innovation and Infrastructure | 56 |
| Sustainable Development Goal 10: Reduced Inequalities | 60 |
| Sustainable Development Goal 11: Sustainable Cities and Communities | 64 |
| Sustainable Development Goal 12: Responsible Consumption and Production | 68 |
| Sustainable Development Goal 13: Climate Action | 72 |
| Sustainable Development Goal 14: Life Below Water | 76 |
| Sustainable Development Goal 15: Life on Land | 80 |
| Sustainable Development Goal 16: Peace, Justice and Strong Institutions | 84 |
| Sustainable Development Goal 17: Partnerships For the Goals | 88 |

Table of Contents

Page 2 of 2



| References Appendices | 92 97 |
|--|-----------|
| Appendix A: Methodology | 97 |
| Developing the FSU Sustainability Research Inventory | 97 97 |
| | 97 |
| Developing the FSU Sustainable Course Guide | 99 101 |
| Mapping Researchers and Courses to the SDGs | |
| Appendix B: FSU SDG Keyword List | 104 |
| Appendix C: FSU University Review SDG Definitions | 107 |
| Appendix D: Potential Funding Related to the UN SDGs | 116 |
| Appendix E: Alignment with the UN SDGs by College | 121 |
| College of Arts and Sciences | 122 |
| College of Business | 123 |
| College of Communication and Information | 124 |
| College of Criminology and Criminal Justice | 125 |
| College of Education | 126 |
| FAMU-FSU College of Engineering | 127 |
| College of Fine Arts | 128 |
| College of Health and Human Sciences | 129 |
| College of Law | 130 |
| College of Medicine | 131 |
| College of Music | 132 |
| College of Nursing | 133 |
| College of Social Sciences and Public Policy | 134 |
| College of Social Work | 135 |
| Dedman College of Hospitality | 136 |
| Jim Moran College of Entrepreneurship | 137 |
| Appendix F: FSU Sustainability Research Inventory Categorized by UN SDGs | 138 |
| Appendix G: FSU Sustainable Course Guide Categorized by UN SDGs | 198 |

Executive Summary

Florida State University (FSU) is an institution that delivers on both daring ideas and career-ready graduates. FSU aims to be a source for breakthroughs in decreasing the nation's carbon footprint, developing strategies to counter the impact of climate change, and finding sustainable approaches that foster growth while ensuring a more level playing field for all citizens. By training future leaders, scholars, workers, and professionals, FSU is uniquely positioned to prepare its community to understand and address sustainability challenges.

In response to these global threats, higher education institutions across the world are strengthening their commitment to the 2030 Agenda for Sustainable Development and the 17 United Nations (UN) Sustainable Development Goals (SDGs). Alignment with the UN SDGs supports FSU's mission and vision and provides a scope for the creation of innovative, interdisciplinary, and collaborative experiences for the FSU community.

The first-ever FSU University Review of Sustainability Research and Teaching on the UN SDGs documents a range of activities that support the full scope of the 2030 Agenda. According to an internal audit of 418 sustainability courses and 335 sustainability researchers, all 17 SDGs are represented in Florida State sustainability research and teaching. In addition, all 17 SDGs are represented in campus programming that supports the FSU community.

The first university review was developed as a Sustainable Campus initiative and is not intended to be a comprehensive report of all SDG activities. FSU's Sustainable Campus used an internal auditing process to identify and code *sustainability-related* teaching and research, which represents a fraction of all academic activity at the University. This is an initial attempt to document, share, and assess Florida State's progress towards the Global Goals.

A Student's Perspective on the SDGs

"My peers and I are passionate about making the world a better, more equitable and sustainable place, yet I sometimes struggle to find ways to get involved. These opportunities and resources exist at Florida State, but information about them is not widely shared on campus. This report lets students, faculty, staff, and the public know more about the amazing things Florida State is working on in terms of diversity, equity, and sustainability. In my opinion, this is one of the most important things that FSU can do for a more sustainable future."

- Gabriella Benacquisto

The university review process highlighted the value of the SDGs for FSU and showed that numerous individuals and units are championing the SDGs across campus. The process also demonstrated that there are emerging opportunities to connect FSU instructors, researchers, and students with external funding to help propel Florida State innovations to the national and global stage. Additionally, the university can continue to explicitly link many other areas of work to the SDGs. This university review is a first step toward deepening and expanding FSU's contributions to achieving the 2030 Agenda.

Introduction

Florida State University (FSU) is an institution that delivers on both daring ideas and career-ready graduates. As a Florida public institution, FSU values stewardship and acknowledges that what the university is learning and doing has profound value both within the state and far beyond it.

To that end, FSU aims to be a source for breakthroughs in decreasing the nation's carbon footprint, developing strategies to counter the impact of climate change, and finding sustainable approaches that foster growth while ensuring a more level playing field for all citizens (Florida State University, 2017). By training future leaders, scholars, workers, and professionals, FSU is uniquely positioned to prepare its community to understand and address sustainability challenges.

In response to these challenges, higher education institutions across the world are strengthening their commitment to the 2030 Agenda for Sustainable Development and the 17 United Nations (UN) Sustainable Development Goals (SDGs).

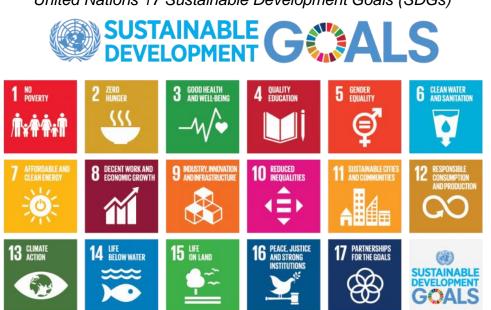


Figure 1 United Nations 17 Sustainable Development Goals (SDGs)

Note. From "Sustainable Development Goals (SDGs)" by the United Nations, n.d.

In 2015, all UN member states adopted the 2030 Agenda for Sustainable Development, which serves as a roadmap to help current and future generations enjoy peace and prosperity for both people and the planet (United Nations, n.d.). The 17 SDGs require

interdisciplinary solutions to complex challenges such as poverty reduction, improvements in health and education, and the fostering of economic growth. At the same time, the goals encourage entrepreneurial and innovative problem solving to address climate change and resource preservation (United Nations, n.d.).

A Student's Perspective on the SDGs By Gabriella Benacquisto

As a former undergraduate and current graduate student, I, like many other students, am always looking for ways to get involved in sustainability initiatives and connect with others who want to make a difference. My peers and I are passionate about making the world a better, more equitable and sustainable place, yet I sometimes struggle to find ways to get involved. These opportunities and resources exist at Florida State, but information about them is not widely shared on campus.

Resources like this report are incredibly useful for empowering the FSU community to get involved with the Sustainable Development Goals and sparking positive change for the future. This report lets students, faculty, staff, and the public know more about the amazing things Florida State is working on in terms of diversity, equity, and sustainability. In my opinion, this is one of the most important things that FSU can do for a more sustainable future.

This report is a great first step towards broadening opportunities for students, staff, and faculty to get involved with the SDGs. But FSU's efforts towards sustainability should not end here. This report should be updated and shared throughout campus every year, and we as a campus community should explore ways that we can work together to harness the full power of the SDGs.

Alignment with the UN SDGs supports FSU's mission and vision and provides a scope for the creation of innovative, interdisciplinary, and collaborative experiences for the FSU community. Specifically, FSU's expanded engagement with the SDGs is supported by a number of factors:

First, FSU is committed to encouraging and incentivizing high-impact, interdisciplinary and inter-college initiatives that address pressing societal issues (Florida State University, 2017, p. 10). Through alignment with the SDGs, FSU can pursue 17 broad thematic areas in which to develop new programs and interdisciplinary faculty hiring initiatives. In addition, FSU can enhance the leadership and coordination of interdisciplinary programs and activities through an internationally recognized framework. Second, FSU aims to expand its global footprint and foster a culturally rich learning environment on campus (Florida State University, 2017, p. 11). Alignment with the SDGs would allow FSU to join an international community of higher education institutions that are driving progress towards the global goals. This would also provide new opportunities for faculty development initiatives that foster international engagement and provide the foundation for new opportunities for students to develop global awareness.

Third, FSU is dedicated to incorporating sustainable living practices into all FSU activities. Through curricular, co-curricular, service, and research initiatives, the university is committed to incorporating practices that reduce its overall footprint and build a University-wide culture of environmental care. Alignment with the SDGs supports this pledge as local actions that are taken to advance climate action, waste minimization, and resource stewardship ultimately help to shape the future of our state and society.

About Florida State University

Florida State University's history began in 1823, making the campus the oldest continuous site of higher education in Florida (Florida State University, n.d.-c). Today, FSU is one of the nation's elite research universities, disseminating knowledge in the sciences, technology, arts, humanities, and professions.

FSU is a public institution, ranking among the Top 20 national public universities in the U.S. *News & World Report* rankings (Farnum-Patronis, 2021). FSU has highly-ranked academic programs within eighteen colleges, offering 283 bachelor's, master's, doctoral, specialist, and professional degree programs. In the 2021-22 academic year, FSU had 45,493 students from every Florida county and 130 countries in addition to 14,226 total employees, including 2,594 traditional faculty (Florida State University, n.d.-a).

FSU is a Carnegie Research I institution and only one of two higher education institutions in Florida to be designated a Preeminent University by the state legislature (Florida State University, 2017). FSU's research expenditures totaled \$328,604,766 for FY 2021, and Florida State consistently ranks in the top 10 universities nationally in physical sciences grants awarded by the National Science Foundation (NSF) (Florida State University, n.d.-b).

The FSU campus includes 383 buildings on 1,716 acres. The main campus in Tallahassee sits on 487 acres (Florida State University, n.d.-a). FSU's National High Magnetic Field Laboratory (MagLab) is the largest and highestpowered magnet laboratory in the world (Florida State University, 2017).

FSU strives to meet sustainability commitments set out in *The Future is Florida State*: Florida State University

FSU Rankings

- FSU is <u>number 19 in the</u> <u>latest U.S. News & World</u> <u>Report rankings</u>. 2021 marked the third consecutive year that the university placed in the Top 20.
- The Journal of Criminal Justice Education ranked Florida State's College of Criminology and Criminal Justice <u>No. 1 in the</u> <u>nation for faculty</u> <u>research</u>.
- U.S. News & World Report's, "Best Graduate Schools," 2021 edition ranks the <u>School of</u> <u>Information's school</u> <u>library media program</u> <u>No. 1.</u>
- College Choice ranks FSU's doctoral degree program in Sport Management among <u>the</u> top programs in the <u>nation, 2020</u>.
- FSU's College of Motion Picture Arts is No. 13 among the nation's <u>Top</u> <u>50 Film Schools</u>, <u>The</u> <u>Wrap News</u>, 2020. The College is ranked <u>No. 15</u> in the nation by <u>The</u> <u>Hollywood Reporter</u>, <u>2021</u>.
- U.S. News & World Report ranks Florida State <u>No. 30 overall and</u> <u>No. 18 among public</u> <u>universities in its "Best</u> <u>National Universities for</u> <u>Veterans" rankings</u>.
- FSU has been

Strategic Plan, 2017-2022, and assesses sustainability performance towards those commitments. The campus also assesses sustainability performance using the Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment and Rating System (STARS). recognized by <u>INSIGHT</u> <u>Into Diversity magazine</u> as a Diversity Champion in higher education for the eighth consecutive year.

Alignment of the 2030 Agenda with the FSU Mission and Vision

In 2017, FSU released a 5-year strategic plan titled *The Future is Florida State*, which articulated the mission, vision, and five core values of the university. The strategic plan was the product of widespread input, reflecting open meetings, extensive discussion groups, and interviews with faculty, students, and staff from all of FSU's colleges, programs, and disciplines (Florida State University, 2017). Embodying the belief that something extraordinary is underway at FSU, the strategic plan highlights the university's responsibility to stewardship as a Florida public institution and forms a foundation for FSU's continued engagement with the 2030 Agenda.

In addition to the campus-wide strategic plan, there are other statements and plans that incorporate the SDGs across campus. While the SDGs may not be mentioned specifically in these documents, their intentions align closely with multiple SDGs and the principles that underlie the goals, such as human rights, gender equality, and participation of vulnerable and marginalized stakeholders.

FSU is committed to increasing the diversity of FSU's student body, faculty and staff and expanding and strengthening programs and initiatives that increase diversity and inclusiveness. By valuing, celebrating and leveraging the differences and similarities within the university community, FSU aims to create a fertile environment for problemsolving that is both inventive and compassionate (Florida State University, 2017).

FSU University Review on the UN Sustainable Development Goals (SDGs) Objectives and Process

As higher education institutions become more involved with implementing the SDGs, a number of institutions have completed university reviews (Goodall & Moore, 2019; Tsinghua University, 2021; University of Auckland, 2021; UC Davis, 2021). Institutions that are conducting reviews are creating new methodologies that can be adapted by other universities to track their own progress.

FSU completed this university review with the following objectives:

- Begin to **measure FSU progress** in advancing the SDGs in research and teaching,
- **Build SDG awareness and inspire involvement** among faculty, staff, and students,
- Connect FSU SDG-related programs and projects with collaborators and

funders across campus, the community, the region, and globally.

FSU's Sustainable Campus used an internal auditing process to identify *sustainability-related* teaching and research, which represents a fraction of all academic activity at the University. The first university review is not intended to be a comprehensive report of all SDG activities. Rather, this review isa first step in documenting and assessing contributions in the fields of research, teaching, and campus programming.

The first university review is not intended to be a comprehensive report of all SDG activities.

The review process and resulting analysis enables FSU to see a clearer picture of the University's strengths, synergies, and areas for further investment and effort. We encourage all university departments to undergo their own internal review to help us better update this information in the future. As the deadline for the global goals approaches, it will be critical to advance the SDGs in bold and innovative ways. This review provides important information to support these efforts.

Stages of the FSU Process

| Timeframe | Event |
|----------------|---|
| September 2019 | Began faculty informational interviews, asking specifically about sustainability-related research and teaching |
| June 2020 | Compiled sustainability keyword list (Appendix B) |
| July 2020 | Began collecting information about faculty research via news channels, specifically FSU News |
| November 2020 | Audited selection of courses from 2018-2021 (curated by sustainability keyword list) to identify sustainability courses |
| February 2021 | Began faculty outreach through Collaborative Collision events |
| March 2021 | Ran sustainability keywords through FEAS |

First Stage: Inventorying Sustainability-Related Research and Teaching

| | application and Pivot database, gathering faculty CVs and scanning for sustainability-related research |
|-------------|--|
| May 2021 | Published FSU Sustainable Course Guide on the Sustainable Campus website |
| June 2021 | Sent email to all faculty members included in the FSU Sustainability Research Inventory for validation |
| July 2021 | Sent email to all academic departments included in the FSU Sustainable Course Guide for validation |
| August 2021 | Published FSU Sustainability Research Inventory on the Sustainable Campus website |

Second Stage: Coding Sustainability-Related Research and Teaching by SDG

| Timeframe | Event |
|---------------|--|
| January 2022 | Two Sustainability Fellows hired; began work with Sustainable Campus Academics and Partnerships Coordinator Created FSU-specific definitions and keywords for all 17 SDGs (Appendix C) Conducted a coding test to confirm team members' reliability and validity when coding |
| February 2022 | Coded researchers in the FSU Sustainability Research Inventory by the 17 SDGs Created a formula to automate coding of researchers and courses by SDGs |
| March 2022 | Coded courses in the FSU Sustainable Course Guide by the 17 SDGs Conducted preliminary analysis and created graphics for presentation Continued working with the formula to validate its reliability and accuracy |

| April 2022 | Presented initial findings to the FSU Office of Research Development |
|------------|--|
|------------|--|

Third Stage: Analyzing and Drafting

| Timeframe | Event |
|-----------|---|
| May 2022 | Continued conducting analysis and creating graphics for report Began researching internal and external funding sources for the 17 SDGs Began researching campus programs related to the 17 SDGs |
| June 2022 | Completed the first draft of the report Received feedback from the FSU Office of Research Development and Sustainable Campus |

Final Stage: Completion

| Timeframe | Event |
|-----------|---|
| July 2022 | Completed final report design and layout Finished proofreading Shared report with FSU Office of Research Development and Sustainable Campus |

Methodology

The university review of research and teaching on the UN SDGs is based on both qualitative and quantitative data obtained from a combination of desk research, informational interviews, and targeted outreach. The review team consisted of one full time Sustainable Campus staff member and three graduate student Sustainability Fellows.

FSU made the decision to address all 17 SDGs in the first university review in order to take into account the breadth of research and teaching across the 2030 Agenda. The review cannot be completely comprehensive due to the multitude of individuals, departments, and units across the campus. However, this document offers a first glimpse into FSU engagement with the 2030 Agenda by identifying, categorizing, and analyzing SDG-related sustainability research and teaching at Florida State. The findings and observations presented in this report are based on available data that could be assessed during the 2020-2022 academic years.

The review process included outreach to the following:

- Faculty, researchers, scholars
- Staff
- Campus units (departments, institutes, centers)

Data Collection for Research and Courses

The review team assessed relevant literature on conducting university SDG reviews. The team decided to benchmark measures for SDG activity by utilizing existing datasets and developing new ones through desk research, informational interviews, and mapping using a curated list of SDG keywords.

The review methodology focused on two key areas of work. These are listed below with their associated data sources:

- **Research:** University communications channels, the Faculty Expertise and Advancement System (FEAS) application, the Pivot database, and Collaborative Collision events
- **Teaching:** Course listings (2018-2020) from the FSU Office of the University Registrar filtered by a curated list of SDG keywords with validation from individual academic units/departments

FSU University Review of Research and Teaching on the UN SDGs

A more detailed explanation of the review methodology and data sources is provided in Appendix A.

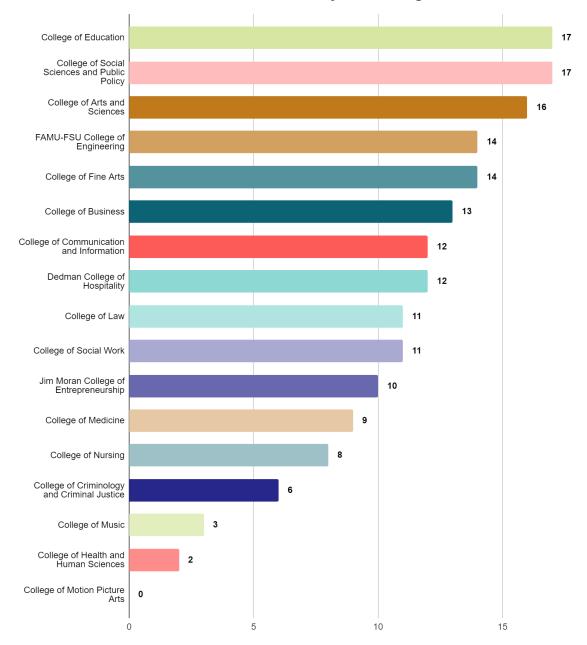
Key Findings and Next Steps

Key Findings

- FSU is currently engaged in a broad range of activities that support the full scope of the 2030 Agenda. According to an internal audit of 418 sustainability courses and 335 sustainability researchers, all 17 SDGs are represented in Florida State research, teaching, and campus programming that supports the FSU community.
- 16 of the 17 Florida State colleges have a sustainability-related course or researcher that addresses at least one of the SDGs. As demonstrated in Figure 2, the College of Education and the College of Social Sciences and Public Policy addressed all 17 SDGs through their sustainability courses and sustainability research. However, the College of Motion Picture Arts was not found to address any SDGs through its sustainability teaching or research.
- FSU sustainability courses most frequently addressed SDG 11: Sustainable Cities and Communities. Other frequently addressed goals included SDG 16: Peace, Justice, and Strong Institutions, SDG 8: Economic Growth, and SDG 13: Climate Action.
- FSU sustainability researchers most frequently addressed SDG 13: Climate Action. Other frequently addressed goals included SDG 11: Sustainable Cities and Communities, SDG 10: Reduced Inequalities, SDG 14: Life Below Water, and SDG 3: Good Health and Well-Being.
- The university review process revealed the difficulties of creating a comprehensive picture of SDG efforts across a large research university. FSU's Sustainable Campus used an internal auditing process to identify sustainability-related teaching and research, which represents a fraction of all academic activity at the University. Replicating this process on a larger scale would require new data collection tools, innovative automation methods, and additional staff resources.

Figure 2: Number of SDGs Addressed by FSU Colleges

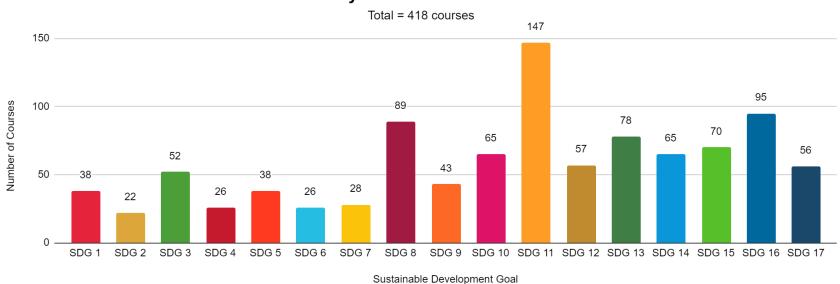
The College of Education and the College of Social Sciences and Public Policy addressed all 17 SDGs through their sustainability courses and sustainability research. However, the College of Motion Picture Arts was not found to address any SDGs through its sustainability teaching or research.



Number of SDGs Addressed by FSU Colleges

Figure 3: The Number of FSU Sustainability Courses Addressing SDGs

SDG 11: Sustainable Cities and Communities was addressed by the highest number of sustainability courses, followed by SDG 16: Peace, Justice, and Strong Institutions, SDG 8: Economic Growth, and SDG 13: Climate Action.



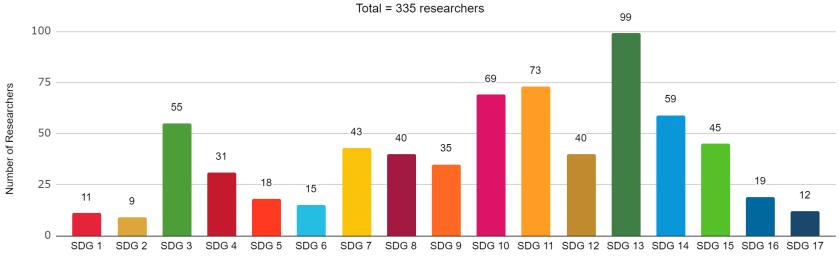
Sustainability Courses that Address SDGs

Note. Some sustainability courses addressed more than one SDG and are counted more than once.

Source: FSU Sustainable Course Guide 2018-2020

Figure 4: The Number of FSU Sustainability Researchers Addressing Addressing SDGs in their Publications and Projects

SDG 13: Climate Action was addressed by the highest number of sustainability researchers in their publications and projects, followed by SDG 11: Sustainable Cities and Communities, SDG 10: Reduced Inequalities, SDG 14: Life Below Water, and SDG 3: Good Health and Well-Being.



Sustainability Researchers that Address SDGs

Sustainable Development Goal

Note. Some sustainability researchers addressed more than one SDG in their publication(s) and/or project(s) and are counted more than once.

Source: FSU Sustainability Research Inventory

Recommended Next Steps for FSU

- Continue to maintain updated sustainability inventories of courses and researchers. The Sustainable Campus team should continue to add new courses and researchers to sustainability inventories and remove outdated information so that these resources remain relevant. Each year, a dedicated staff member should review a list of new courses and researchers, determine which are sustainability-focused and/or -related, and categorize them by SDG. Updates can also be made on a rolling basis during the year as new information becomes available.
- **Publish an annual university review on the UN SDGs.** The Sustainable Campus team should continue to publish annual reviews of research and teaching on the UN SDGs. Over time, these reviews will allow the campus community to see where progress is being made and other areas for improvement.
- Expand the university review to all courses, researchers, campus programs, and operations. In order to view a more complete picture of FSU's contribution to the SDGs, the Sustainable Campus team should expand this methodology to *all* courses and researchers at Florida State. In addition, the Sustainable Campus team should examine the full range of campus programming and operations to identify additional ways FSU is aligned with the 2030 Agenda.
- Identify and utilize additional research strategies. Broadening the scope of the university review will require new data collection tools, innovative automation methods, and additional staff resources. For example, researchers and instructors could be asked to self-identify their research and/or courses as "sustainability-related" through a survey. They could also self-identify which SDG they feel best aligns with their work. This survey could be integrated into current course proposal systems and/or new faculty orientation in order to automate data collection and continuously update existing databases.
- Provide incentives to encourage more interaction with the SDGs. FSU could provide funding or additional resources for researchers or instructors who integrate the SDGs into their work, particularly goals that are not frequently addressed in sustainability research and teaching. Incentives could take the form of small grants, faculty workshops, and/or Collaborative Collision events.

- Create an interactive dashboard displaying FSU alignment with the SDGs. The FSU Sustainability Research Inventory and the FSU Sustainable Course Guide are currently housed in static Excel documents. Displaying the data in a more user-friendly way could promote greater engagement with the SDGs and collaboration amongst researchers and instructors. FSU could utilize software such as Power BI to create an interactive web page where the Florida State community could easily filter through data to find courses and researchers that address particular SDGs.
- Celebrate the sustainability achievements of FSU instructors and researchers. Amplify and recognize the projects and initiatives that are directly contributing to the SDGs through storytelling, events, and other communication channels.
- Consider new formats for interdisciplinary collaboration centered around individual SDGs. More research is needed to identify new formats for cross-disciplinary collaboration around the 2030 Agenda, such as formal institutes or centers, majors/minors/certificates, and/or colleges.

Individual SDG Chapters







Summary

The goal of SDG 1: No Poverty is to decrease the number of people living in poverty by 50% and completely eradicate extreme poverty for all everywhere by 2030. This includes implementing appropriate social protection systems and ensuring access to basic technological, financial, and economic resources.

SDG 1 also aims to build resilience and reduce vulnerability in cases of climate-related events and other environmental, social, and economic disasters. Ensuring the mobilization of resources and creating sound policy frameworks to support poverty eradication actions are additional targets for SDG 1.

Sustainable Campus identified 10 sustainability researchers and 39 sustainability courses relevant to SDG 1 throughout the university.

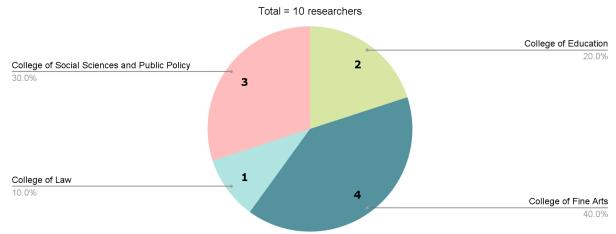
Faculty members address SDG 1 by researching poverty in relation to the Flint water crisis, the built environment, climate change impacts, and access to education, among other topics.

Students can learn more about SDG 1 through courses such as Diversity and Social Justice (SOW 4620), which focuses on the advancement of social and economic justice and human rights in national and global contexts. Other courses address SDG 1 through the lens of hospitality, educational policy, political science, nursing, African-American studies, economics, geography, international affairs, public administration, sociology, and social work.

Research

Figure 5: Number of Sustainability Researchers that Address SDG 1 by College

Four research projects and publications within the College of Fine Arts were found to be relevant to SDG 1 and the eradication of poverty around the world. Three researchers in the College of Social Sciences and Public Policy, two in the College of Education, and one in the College of Law also addressed SDG 1.





Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. Jill Pable is a Professor of Interior Design & Architecture in the College of Fine Arts. Dr. Pable's work provides a practical introduction to the effective physical design of homes and other facilities that assist unhoused persons in countries identified as middle-to-high income. More information on Dr. Pable and her work can be found here.

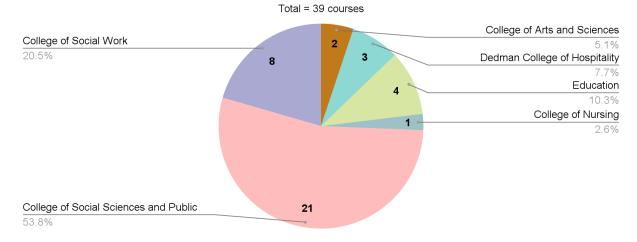
Dr. Katrinell Davis is an Associate Professor of Sociology and African American Studies in the College of Social Sciences and Public Policy. She is a social change scholar inspired by the struggles of working-class people in urban areas who contend with extraordinary socioeconomic constraints, despite their best efforts. You can read more about Dr. Davis, including her recent work on the water crisis in Flint, Michigan, <u>here</u>.



Teaching

Figure 6: Number of Sustainability Courses that Address SDG 1 by College

The Sustainable Campus team found that 55.3% of sustainability courses (21 courses) that addressed SDG 1 were within the College of Social Science and Public Policy, and 20.5% (8 courses) were within the College of Social Work. In addition, the College of Education had four courses that addressed SDG 1; the Dedman College of Hospitality had three courses; the College of Arts and Sciences had two courses; and the College of Nursing had one course.



Number of Sustainability Courses that Address SDG 1 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Economics of Compassion (ECO 4312), an undergraduate Economics course in the College of Social Sciences and Public Policy, addresses international and domestic issues of compassionate, charitable, and philanthropic activities. By offering an economic framework from which students can critically evaluate public and private actions whose purpose is to eliminate hunger, disease, poverty or other human burdens, students can work to better understand and address SDG 1 in the future.

FSU Programs

The Unconquered Scholars Program provides support services for youth who experienced foster care, homelessness, relative care, or "Ward of the State" status. Many Scholars have faced profound hardships during childhood that may increase their risk of leaving academia without a degree. Research indicates former foster youth are far less likely to earn a degree than their non-foster care peers. Florida State University is committed to meeting the unique needs of Unconquered students so they experience the long-term professional and personal benefits associated with educational attainment (Center for Academic Retention & Enhancement, n.d.).





Summary

The goal of SDG 2: Zero Hunger is to ensure that all people, in particular people in poverty and vulnerable situations, have access to safe, nutritious and sufficient food year round by 2030. This includes eradicating all forms of malnutrition, specifically in children, women, and the elderly, as well as doubling agricultural productivity and ensuring sustainable food production systems. SDG 2 also aims to maintain the genetic diversity of seeds, correct and prevent trade restrictions, and ensure the proper functioning of the food commodity market.

Sustainable Campus identified 9 sustainability researchers and 22 sustainability courses relevant to SDG 2 throughout the university.

Faculty members address SDG 2 by researching agricultural water and soil management, food contamination, genome response in maize, and subsistence in the remote western pacific, among other topics.

Students can learn more about SDG 2 through courses such as Food and Society (HUN 2125), which examines the impact of society on human foodways and the role of food and nutrition in national development and global politics. Other departments with relevant courses include:

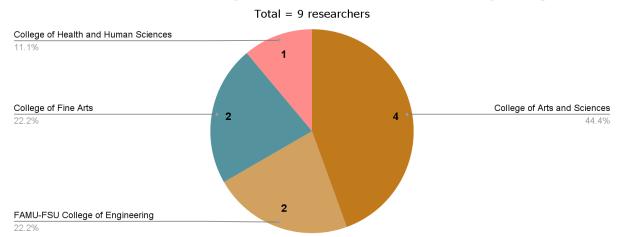
- Tourism
- Educational Policy
- Economics
- Geography
- Biological Science
- Anthropology

- Civil and Environmental
 Engineering
- Entrepreneurship
- Urban and Regional Planning
- Earth, Ocean, and Atmospheric Science

Research

Figure 7: Number of Sustainability Researchers that Address SDG 2 by College

The College of Arts and Sciences was found to have four sustainability researchers that addressed SDG 2 in their work. The College of Fine Arts and the FAMU-FSU College of Engineering each had two sustainability researchers, and the College of Health and Human Sciences had one.



Number of Sustainability Researchers that Address SDG 2 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. Kathryn Jones is an Associate Professor of Biological Science in the College of Arts and Sciences. She focuses her research on the symbiosis between nitrogen-fixing bacteria and legume plants, an issue for farmers in the developing world. You can read more about Dr. Jones and her research <u>here</u>.

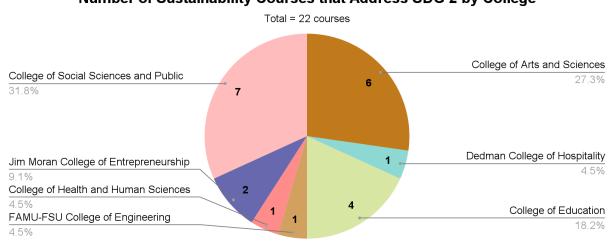
Dr. Ming Ye is a Professor of Geology and Environmental Science in the College of Arts and Sciences. He researches hydrogeology and groundwater reactive transport modeling. Dr. Ye and his team developed an ArcGIS-based Nitrogen Load Estimation Toolkit for estimating transport of nitrogen in soils from septic drainfields to the groundwater table. You can read more about Dr. Ye here.



Teaching

Figure 8: Number of Sustainability Courses that Address SDG 2 by College

The College of Social Sciences and Public Policy was found to have the most sustainability courses relevant to SDG 2 with seven courses across all departments. The College of Arts and Sciences had six courses, the College of Education had four courses, and the Jim Moran College of Entrepreneurship had two. The Dedman College of Hospitality, the College of Health and Human Sciences, and the FAMU-FSU College of Engineering each had one course.



Number of Sustainability Courses that Address SDG 2 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

The Ecology of Food (IDS 2740), an undergraduate Biological Science course in the College of Arts and Sciences, explores the basic ecology of agriculture and fisheries and considers how conventional and alternative food-production practices generate and solve ecological problems. The course focuses on several major current issues (e.g. genetically modified organisms, pollinator declines, organic agriculture, and fisheries). For each topic, students learn the science behind the issue and the social forces shaping the problem. Students also learn through discussions of scientific and popular writings, lectures, hands-on and written projects, oral presentations, local speakers and field trips.

Campus Programs

The Food for Thought Pantry is run by the Department of Student Support and Transitions for currently enrolled students who are facing food insecurity. The pantry partners with Second Harvest of the Big Bend to keep the shelves and freezers stocked (Department of Student Support and Transitions, n.d.).

The Food Recovery Network aims to eliminate food waste on campus and in the Tallahassee community. Since 2014 when the FSU chapter was formed, the Food Recovery Network has recovered over 130,000 pounds of consumable excess food from various locations around campus. This food goes directly to partner agencies, both on and off campus, who distribute it to individuals and families experiencing food insecurity (Sustainable Campus, n.d.-a).

Round Up for FSU was launched by Florida State University's Office of Business Services in July 2016, and partnered with the Student Government Association in August 2019. Round Up for FSU gives customers at specific campus retail locations the opportunity to "Round Up" their purchases to the nearest quarter (25ϕ). The difference is automatically donated to the Food For Thought Pantry (Office of Business Services, n.d.).

The Seminole Organic Garden is a shared space amongst organizations and individuals across campus. Students and staff can get involved with the garden by attending Garden Work Hours or renting a garden bed (Sustainable Campus, n.d.-b).





Summary

The goal of SDG 3: Good Health and Well-Being is to ensure healthy lives and promote well-being for everyone at all ages. Specific targets include:

- Reducing the global maternal mortality ratio;
- Reducing premature mortality from non-communicable diseases and road traffic accidents; and
- Reducing the number of deaths and illnesses from hazardous chemicals and pollution.

SDG 3 also aims to end preventable deaths of newborns and children and epidemics of communicable diseases. The prevention and treatment of substance abuse, access to sexual and reproductive health-care services, achieving universal health coverage, and vaccine research and development are also targets under SDG 3.

Sustainable Campus identified 55 sustainability researchers and 52 sustainability courses relevant to SDG 3 throughout the university.

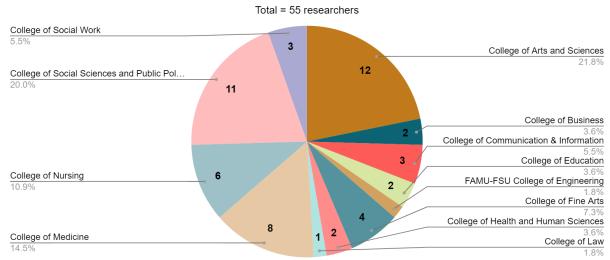
Faculty members address SDG 3 by researching topics such as undocumented migrants' access to health services, church-based weight management programs, health disparities in people of color, and telehealth, among other topics.

Students can learn more about SDG 3 through courses in the departments of Urban and Regional Planning, Sociology, Public Health, Public Administration and Policy, Geography, Nursing, Medicine, Civil and Environmental Engineering, Interdisciplinary Health Sciences, Educational Leadership and Policy Studies, Communication, Earth, Ocean, and Atmospheric Science, Chemistry and Biochemistry, Biological Science, Political Science, Economics, and Recreation, Tourism and Events.

Research

Figure 9: Number of Sustainability Researchers that Address SDG 3 by College

The College of Arts and Sciences was the highest performing college for this goal with 12 sustainability researchers addressing SDG 3 across all departments. The College of Social Sciences and Public Policy had 11 researchers, the College of Medicine had eight researchers, and the College of Nursing had six researchers.





Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. Sabrina Dickey is an Associate Professor in the College of Nursing. Her focus is on the health disparity of prostate cancer among black men and health and illness communication within Black families. You can read more about Dr. Dickey and her recent publication, *Environmental and Racial Justices Issues in Black Communities 2.5 Years After Major Disasters*, here.

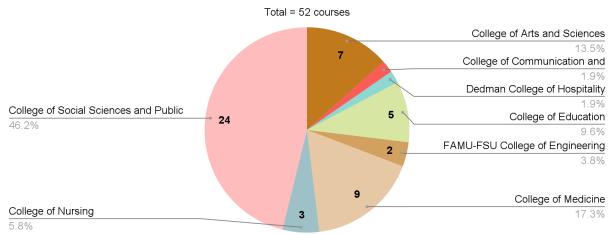
Dr. Chris Uejio is an Associate Professor of Public Health in the College of Social Sciences and Public Policy. He studies how the physical environment, broadly defined, influences human health and well-being. He frequently works with health departments to understand and adapt to climate change. You can read more about Dr. Uejio and his research <u>here</u>.



Teaching

Figure 10: Number of Sustainability Courses that Address SDG 3 by College

The College of Social Sciences and Public Policy had 24 sustainability courses that were found to address SDG 3. The College of Medicine had nine courses, the College of Arts and Sciences had seven, the College of Communication had five, the College of Nursing had three, the FAMU-FSU College of Engineering had two, and the Colleges of Communication and Information and Hospitality each had one.



Number of Sustainability Courses that Address SDG 3 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Ecology of Infectious Disease (PCB 4402), an undergraduate level course in the Biological Science department of the College of Arts and Sciences, addresses SDG 3 by exploring how concepts and tools of basic ecology can and have been used to understand the dynamics of infectious disease and contribute to our ability to predict, prevent, and control disease outbreaks. Students consider diseases of humans and their domesticated plants and animals, as well as the role of disease in natural systems. Students are also expected to read extensively in the primary literature and to contribute to regular class activities and discussions as well as research and present information on specialized topics such as the role of conservation corridors in the spread of disease, possible responses to pandemics and bioterrorism, and identification of sources of emerging diseases.

Campus Programs

The Center for Health Advocacy & Wellness (CHAW) at University Health Services encourages students to make healthy lifestyle decisions that facilitate academic success and lead to life-long health and wellness. The Center for Health Advocacy and Wellness provides quality, research-based wellness services and Health Promotion programs available to all FSU students (CHAW, n.d.).

Counseling & Psychological Services provides assistance with concerns such as homesickness, struggles with relationships, sexual identity and gender questions, cultural issues, eating and body image, substance use, worries, and depression (Counseling & Psychological Services at Florida State University, n.d.).

Campus Recreation is FSU's leader in creating healthy lifestyles through fitness, wellness, sports, outdoor adventures, and aquatics. Campus Recreation benefits include unlimited access to the Leach Student Recreation Center, the Fitness & Movement Clinic, the FSU Reservation Waterfront Park, and most group fitness classes (FSU Campus Recreation, n.d.).





Summary

SDG 4: Quality Education aims to ensure that all children complete free, equitable and quality pre-primary, primary, and secondary education. This includes technical and vocational skills. The UN aims to eliminate gender disparities in education and ensure that all youth achieve literacy by 2030. These goals should be achieved by building and upgrading education facilities, substantially expanding the number of scholarships available, and increasing the supply of qualified teachers.

Sustainable Campus identified 27 sustainability researchers and 27 sustainability courses relevant to SDG 4 throughout the university.

FSU research relevant to SDG 4 includes topics such as qualitative research methods and institutional policies in higher education, academic accommodations, school climate and leadership, science identity for underrepresented minorities in STEM, and nonformal learning.

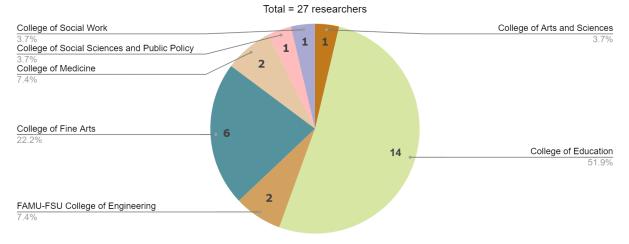
FSU departments and centers that were found to address SDG 4 in sustainability research and courses include:

- Dance
- Family Medicine and Rural Health
- Interior Architecture and Design
- Sociology
- Chemical & Biomedical Engineering
- Educational Leadership and Policy Studies
- School Psychology
- Art Education
- NHMFL

- Center for Postsecondary
 Success
- Educational Psychology and Learning Systems
- Learning Systems Institute
- Social Work
- Psychology
- Electrical & Computer Engineering
- Urban and Regional Planning
- Center for Economic Forecasting and Analysis

Figure 11: Number of Sustainability Researchers that Address SDG 4 by College

The College of Education was found to have 14 sustainability researchers whose work was relevant to SDG 4. The College of Fine Arts had six researchers, the Colleges of Medicine and Engineering each had two researchers, and the Colleges of Arts and Sciences, Social Work, and Social Sciences and Public Policy each had one researcher.



Number of Sustainability Researchers that Address SDG 4 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. Lara Perez-Felkner is an Associate Professor of Higher Education and Sociology in the College of Education. She investigates racial-ethnic, gender, and socioeconomic disparities in post-secondary educational attainment and entry to scientific career fields. You can read more about Dr. Perez-Felkner and her research here.

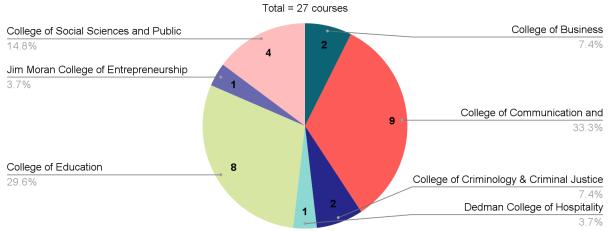
Dr. Ayesha Khurshid is an Associate Professor of International and Multicultural Education in the College of Education. She investigates international education and gendered citizenship; women's education; international educational reforms and local cultural practices; and multicultural education in international contexts. You can read more about Dr. Khurshid and her research <u>here</u>.



Figure 12: Number of Sustainability Courses that Address SDG 4 by College

The College of Communication and Information had nine sustainability courses that address SDG 4 while the College of Education had eight courses. The College of Social Sciences and Public Policy had four courses, the Colleges of Business and Criminology had two courses, and the Colleges of Entrepreneurship and Hospitality each had one course.

Number of Sustainability Courses that Address SDG 4 by College



Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Foundations of Education (EDF 5743) is a graduate level course in the College of Education that provides an overview of the social, cultural, philosophical, political, historical, and economic foundations of education. It examines the relationship between schools and the society in which they exist. Students examine the influences of culture, history, and economy on educational beliefs, policies, and practices.

Introduction to International Development (EDF 2082) is an undergraduate level course in the College of Education that constitutes a basic overview of international development work in the education sector in societies of Asia, Africa, the Middle East and Latin America. The course explores different approaches to international development and how these shape and influence educational improvement initiatives in countries of the Global South.

The Academic Center for Excellence (ACE) is a university learning center, focused on helping students develop the study skills and success habits that are necessary in a large research university and valued by future employers. ACE aims to teach, advise, tutor, and provide an academic environment that inspires students to excel and to use all the resources available to them (Academic Center for Excellence, n.d.).

The Center for the Advancement of Teaching seeks to recognize and cultivate learner-centered teaching throughout the university by providing support to faculty as they balance cutting-edge research with thoughtful teaching. The Center provides a space for collegial exchange about teaching and learning, bringing together faculty at all levels and across disciplines, to hone their expertise in facilitating learning and to promote the collective project of providing FSU students with a preeminent education (Center for the Advancement of Teaching, n.d.).

The Program for Instructional Excellence (PIE), a unit of The Graduate School, strives to enrich the learning experience for undergraduate students at FSU by supporting the teaching efforts of graduate student teaching assistants through its various services. PIE offers professional development programs that create opportunities to foster a sense of collaboration and community among all graduate student teaching assistants and any graduate student interested in learning best practices in teaching and learning while at FSU (PIE, n.d.).





Summary

The goal of SDG 5: Gender Equality is to achieve gender equality and empower all women and girls. The targets to achieve this goal include:

- Ending all forms of discrimination against women and girls;
- Eliminating all forms of violence and harmful practices against women and girls;
- Recognizing and valuing unpaid care and domestic work;
- Ensuring women's full and effective participation and equal opportunities for leadership; and
- Ensuring universal access to sexual and reproductive health and reproductive rights.

Undertaking reforms to give women equal economic rights, enhancing the use of communication and information technology, and adopting and strengthening policies that promote the empowerment of women and girls are also ways in which SDG 5 can and should be achieved.

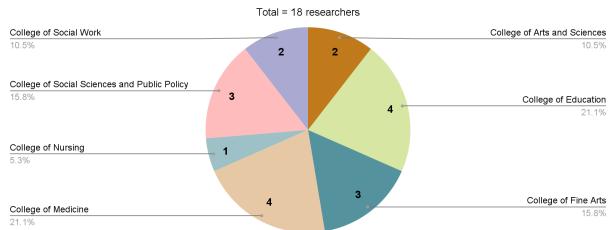
Sustainable Campus identified 18 sustainability researchers and 39 sustainability courses relevant to SDG 5 throughout the university.

Faculty members address SDG 5 by researching educational policymaking, planning in developing areas, health disparities and mental health equity, aging and incarceration, the child welfare system, black infant mortality, and economic sociology, among other topics.

Students can learn more about SDG 5 through courses that address gender and identity, the role of women in disasters, domestic workers, sports ethics, women-owned businesses, reproductive health issues, crime, and political culture, among other topics.

Figure 13: Number of Sustainability Researchers that Address SDG 5 by College

The Colleges of Education and Medicine each had four sustainability researchers that were found to address SDG 5. The Colleges of Fine Arts and Social Sciences and Public Policy each had three researchers, the Colleges of Social Work and Arts and Sciences each had two researchers, and the College of Nursing had one researcher.





Source: FSU Sustainability Research Inventory

Faculty Spotlight



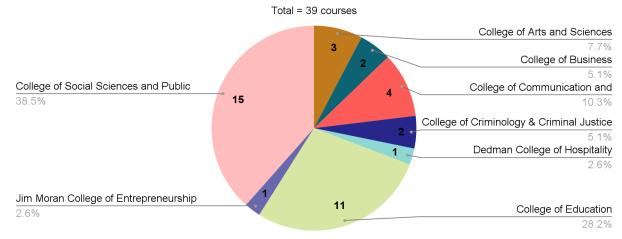
Dr. Paromita Sanyal is a Professor of Sociology in the College of Social Sciences and Public Policy. Her research focuses on understanding development, anti-poverty, and women's empowerment interventions from a sociological perspective. Dr. Sanyal has strong interests in gender and development and economic sociology. You can read more about Dr. Sanyal <u>here</u>.

Dr. Melissa Radey is a Professor in the College of Social Work and is a faculty affiliate for the Florida Institute for Child Welfare. Her research focuses on families and understanding barriers to economic, social, and physical well-being. You can read more about Dr. Homan and her recent publication, *Informal Networks of Low-Income Mothers: Support, burden and change, here.*



Figure 14: Number of Sustainability Courses that Address SDG 5 by College

15 sustainability courses in the College of Social Sciences and Public Policy were found to be relevant to SDG 5. In addition, there were 11 courses in the College of Education, four courses in the College of Communication and Information, three courses in the College of Arts and Sciences, two courses in both the College of Business and the College of Criminology, and one course each in the College of Hospitality and the Jim Moran College of Entrepreneurship.



Number of Sustainability Courses that Address SDG 5 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Sexual Health and The Modern World (IDS 2332r) is a undergraduate interdisciplinary Sociology course in the College of Social Sciences and Public Policy that analyzes and synthesizes information centering on a number of current sexual and reproductive health issues. Course materials include the interdisciplinary theorizing of feminists, medical social scientists, anthropologists, demographers, and public health scholars.

Domestic, Factory, and Sex Work: Feminist Perspectives on Globalization (IDH 2403) is an undergraduate level course in the College of Social Sciences and Public Policy. By focusing on the roles that domestic workers, factory workers, and sex workers play within the global economy, this course engages feminist debates about the ethics of globalization, the challenges of transnational activism, and the potential complicities of U.S. citizens in maintaining global structures of inequality.

The Women in Entrepreneurship (WIE) Initiative is a Jim Moran College program that aims to inspire, instill and ignite women entrepreneurs throughout the FSU community and beyond. WIE aims to offer collaborative programming, networking, support and promotion of FSU students, alumnae, faculty, and community partners pursuing entrepreneurial endeavors (FSU Women in Entrepreneurship, n.d.).

The Women in Math, Science & Engineering Program is a living-learning community housed in Cawthon Hall at FSU. WIMSE is committed to the success of women in the fields of science, engineering and mathematics (WIMSE, n.d.).





Summary

The goal of SDG 6: Clean Water and Sanitation is to achieve universal and equitable access to safe and affordable drinking water for all. By 2030, the UN aims to:

- Increase water-use efficiency;
- Improve water quality;
- Implement integrated water resources management at all levels; and
- Protect and restore water-related ecosystems.

Ending open defecation, expanding international cooperation and capacity-building support to developing countries in water- and sanitation-related activities, and strengthening the participation of local communities in improving water and sanitation management are other ways the UN hopes to advance SDG 6 across the globe.

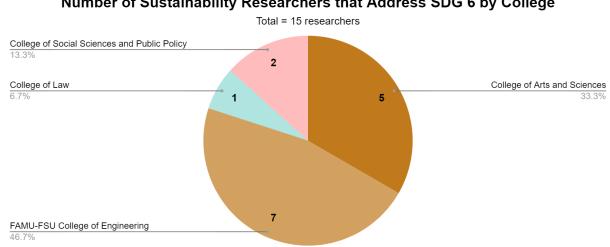
Sustainable Campus identified 15 sustainability researchers and 26 sustainability courses relevant to SDG 6 throughout the university.

Faculty members address SDG 6 by researching groundwater reactive transport modeling, hydraulic modeling, subsurface water flow, private water allocation, water cycles, and drinking and wastewater treatment, among many other topics.

Students can learn more about SDG 6 through the lens of hospitality, educational policy, political science, nursing, African-American studies, economics, geography, international affairs, public administration, sociology, and/or social work in FSU courses.

Figure 15: Number of Sustainability Researchers that Address SDG 6 by College

Seven sustainability researchers in the College of Engineering were found to be relevant to SDG 6. The College of Arts and Sciences had five researchers, the College of Social Sciences and Public Policy had two researchers, and the College of Law had one researcher.



Number of Sustainability Researchers that Address SDG 6 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



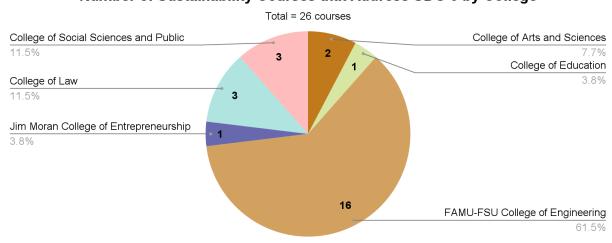
Dr. Erin Ryan is the Elizabeth C. and Clyde W. Atkinson Professor, Associate Dean for Environmental Programs, and Director of the FSU Center for Environmental, Energy, and Land Use Law at the College of Law. Dr. Ryan specializes in environmental and natural resources law and water law. You can read more about Dr. Ryan and her recent publication, The Public Trust Doctrine, Private Rights in Water, and the Mono Lake Story, here.

Dr. Nasrin Alamdari is an Assistant Professor of Civil and Environmental Engineering in the FAMU-FSU College of Engineering. Her research focuses on urban hydrology, sustainable and resilient urban water systems, stormwater management, and the impact of nonstationary stressors such as climate and land use change on hydrology. You can read more about Dr. Alamdari here.



Figure 16: Number of Sustainability Courses that Address SDG 6 by College

SDG 6 was found to be relevant to sixteen sustainability courses in the FAMU-FSU College of Engineering. Both the Colleges of Law and Social Sciences and Public Policy had three courses; the College of Arts and Sciences had two courses; and the Colleges of Education and Entrepreneurship each had one course.



Number of Sustainability Courses that Address SDG 6 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Water Reuse Engineering (ENV 5407) is a graduate level course in the department of Civil and Environmental Engineering in the FAMU-FSU College of Engineering. The course covers wastewater reclamation and reuse; treatment processors and systems; monitoring and control instrumentation; health and social aspects; and the design of facilities/systems.

Water Resources (GEO 4280) is an undergraduate level course in the Geography department of the College of Social Sciences and Public Policy. This course provides students with a comprehensive overview of the natural processes associated with water occurrence and resources. Focus is given to water's unique properties, how it occurs and moves through the Earth's environment, how it impacts human habitation, and its future as a critical and valuable natural resource. Development of socio-economic concepts of management, supply, use, reclamation, and sustainability are also emphasized.

The Maji Project at FSU raises awareness of the global water crisis and the importance of clean water. In 2021, the organization fundraised for 120 Sawyer POINTOne water filters for communities in need (Sawyer, 2021).

7 AFFORDABLE AND CLEAN ENERGY



Summary

SDG 7: Affordable and Clean Energy aims to ensure universal access to affordable, reliable, and modern energy services by 2030. It also aims to:

- Substantially increase the share of renewable energy in the global energy mix;
- Double the global rate of improvement in energy efficiency;
- Enhance international cooperation to facilitate access to clean energy research and technology; and
- Expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries.

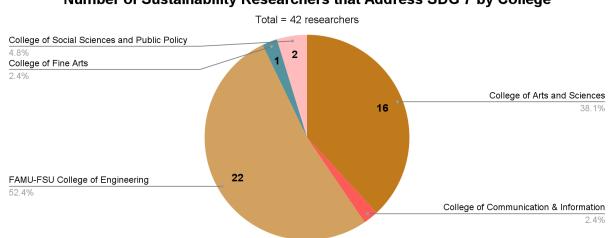
Sustainable Campus identified 42 sustainability researchers and 28 sustainability courses relevant to SDG 7 throughout the university.

Faculty members address SDG 7 by researching energy policy, energy storage devices, intermetallic magnets for electric vehicles, power systems, heat transfer, energy efficiency, fuel cells, and renewable energy methods, among other topics.

Courses address SDG 7 through the lens of mechanical engineering, geography, law, economics, electrical and computer engineering, history, entrepreneurship, educational leadership and policy studies, and/or Earth, ocean, and atmospheric sciences.

Figure 17: Number of Sustainability Researchers that Address SDG 7 by College

Twenty two sustainability researchers in the FAMU-FSU College of Engineering were found to address SDG 7. The College of Arts and Sciences had sixteen researchers while the College of Social Sciences and Public Policy had two researchers. The Colleges of Fine Arts and Communication and Information each had one researcher.





Source: FSU Sustainability Research Inventory

Faculty Spotlight



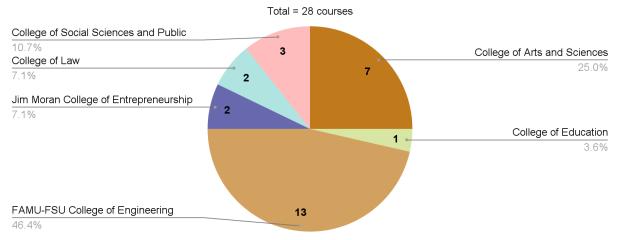
Dr. Tian Tang is an Assistant Professor in the Askew School of Public Administration and Policy. Her research is at the intersection of environmental and energy policy, technology policy, and policy implementation through cross-sectoral collaboration in the context of global climate change and sustainability. You can read more about Dr. Tang and her research here.

Dr. Omar Faruque is an Associate Professor in the Electrical and Computer Engineering department of the FAMU-FSU College of Engineering. His research focuses on power systems components and their controllers. He uses real-time simulation techniques for studying system interactions in the areas of electric ship technology, smart grid, renewable energy, and in other emerging areas in power engineering. You can read more about Dr. Faruque <u>here</u>.



Figure 18: Number of Sustainability Courses that Address SDG 7 by College

Thirteen FAMU-FSU College of Engineering sustainability courses were found to be applicable to SDG 7. In addition, seven courses from the College of Arts and Sciences, three courses from the College of Social Sciences and Public Policy, two courses from the Colleges of Law and Entrepreneurship, and one course from the College of Education were identified as relevant.



Number of Sustainability Courses that Address SDG 7 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Energy Conversion Systems for Sustainability (EML 5451) in the department of Mechanical Engineering (FAMU-FSU College of Engineering) is a graduate level course that discusses the challenges of making the global energy system independent of finite fossil-energy sources. The course emphasizes strategies for producing energy that is free of greenhouse gas emissions, including renewable energy sources such as solar, wind, and biomass.

Energy (GLY 3039) is an undergraduate level course in the Earth, Ocean and Atmospheric Science department (College of Arts and Sciences) that examines the origin of our energy and mineral resources (e.g., fossil fuels, uranium, hydrogen), their global supply, and the environmental impacts of extracting and utilizing these resources. Emphasis is placed on the chemical nature of the resources and the impact on the chemical composition of the ocean/atmosphere and the global heat budget.

The Center for Advanced Power Systems (CAPS) is a multidisciplinary research center organized to perform basic and applied research to advance the field of power systems technology. CAPS' emphasis is on application to electric utility, defense, and transportation, as well as developing an education program to train the next generation of power systems engineers (CAPS, n.d.).

The Sustainable Energy Science and Engineering Center addresses challenging alternative energy issues through innovative solutions for consumers and industry. The Center's Off-Grid Zero Emissions Building Project (OGZEB) involves the design, construction and operation of an 800 sq. ft. completely solar-powered building. It is a prototype for developing and implementing cutting edge, alternative energy technologies in both residential and commercial settings (Energy & Sustainability Center, 2006).

The Sustainability and Governance Lab is an interdisciplinary research hub that investigates the planning, adoption, implementation, and effectiveness of policies and programs that promote sustainable development. In the Clean Energy Innovation and Policy area, researchers study 1) clean energy technology innovation and diffusion and 2) impacts and implementation of energy policies and sustainability programs (Sustainability and Governance Lab, n.d.-a).





Summary

The goal of SDG 8: Decent Work and Economic Growth is to promote inclusive and sustainable economic growth, full and productive employment, and decent work for all. UN initiatives that support this goal include the implementation of policies to promote sustainable tourism and the protection of labor rights. Increasing support for developing countries and creating policies that support decent job creation, entrepreneurship, and innovation are also targets to be achieved by 2030.

Sustainable Campus identified 36 sustainability researchers and 89 sustainability courses relevant to SDG 8 throughout the university.

Faculty members address SDG 8 by researching employment barriers, microfinance, women's entrepreneurship, rehabilitation counseling, employment transitions, social assimilation, polarized demands, housing economics, morality, urban resilience, and clean energy, among other topics.

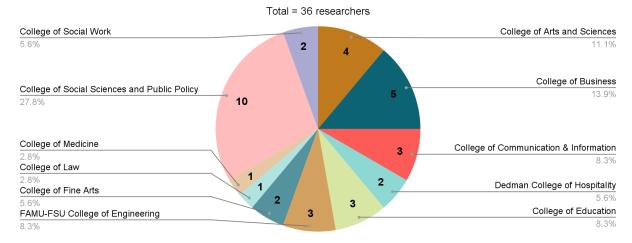
Courses address SDG 8 through the lens of:

- Educational Leadership and Policy Studies
- Modern Languages and Linguistics
- Electrical and Computer Engineering
- Management
- Communication
- Criminology and Criminal Justice
- Social Science
- Hospitality
- Anthropology

- Classics
- Political Science
- Criminology and Criminal Justice
- Civil and Environmental Engineering
- Entrepreneurship
- Law
- Economics
- Geography
- International Affairs
- Urban and Regional Planning

Figure 19: Number of Sustainability Researchers that Address SDG 8 by College

The College of Social Sciences and Public Policy had ten sustainability researchers that addressed SDG 8 in their publications and projects. The College of Business had five researchers, while the College of Arts and Sciences had four researchers. The Colleges of Communication and Information, Education, and Engineering each had three researchers.



Number of Sustainability Researchers that Address SDG 8 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



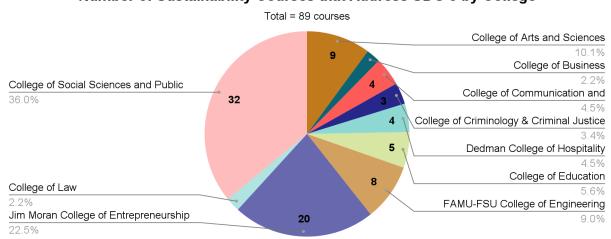
Dr. Julie Harrington is the Director of the FSU Center for Economic Forecasting and Analysis (CEFA). Her current research interests focus on the economics of the environment, education, energy, development, and affordable housing, among others. You can learn more about Dr. Harrington and her research <u>here</u>.

Dr. Sean McGinley is an Assistant Professor in the Dedman College of Hospitality. He has an interest in researching careers and how people develop professionally. You can learn more about Dr. McGinley and his recent publication, *Hotels' Environmental Leadership and Employees' Organizational Citizenship Behavior*, <u>here</u>.



Figure 20: Number of Sustainability Courses that Address SDG 8 by College

Thirty two sustainability courses in the College of Social Sciences and Public Policy were found to be relevant to SDG 8. The Jim Moran College of Entrepreneurship had twenty courses, while the College of Arts and Sciences had nine courses, and the FAMU-FSU College of Engineering had eight courses.



Number of Sustainability Courses that Address SDG 8 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Business & Society (MAN 4701) is an undergraduate course in the Management program of the College of Business. The course is an examination of current and future issues in business and society with an emphasis on the social responsibility of businesses and future challenges for businesses in a pluralistic society.

Sustainable Value Chains in a Net Zero Carbon World (ENT 5XXX) is a graduate level course in the Jim Moran College of Entrepreneurship. This course focuses on sustainability of supply chains through the lens of these climate change drivers. These challenges transcend industry sectors. The course focuses on the food and agriculture industry as a microcosm for the decarbonization of supply chains. Students learn Life Cycle Analyses through their subset Carbon Footprint of Products and study the importance of value transfer through incentives and draw out critiques of treaty-based carbon markets in achieving Net-Zero by 2050.

The FSU Center for Economic Forecasting and Analysis (CEFA) specializes in conducting economic research and performing economic analyses to examine public policy issues across a spectrum of research areas. CEFA provides advanced research and training in energy, aerospace, environmental economics, and economic development, among other areas (CEFA, n.d.).

The Sustainability and Governance Lab is an interdisciplinary research hub that investigates the planning, adoption, implementation, and effectiveness of policies and programs that promote sustainable development. In the Economic Development area, researchers study 1) driving forces of urban innovation and entrepreneurship and 2) local economic development strategies and their impacts on economic outcomes, social equity and sustainability (Sustainability and Governance Lab, n.d.-b).

9 INDUSTRIES, INNOVATION AND INFRASTRUCTURE



Summary

SDG 9: Industries, Innovation and Infrastructure aims to build resilient infrastructure, promote sustainable industrialization, and foster innovation. The targets for this goal include:

- Developing high-quality, reliable, sustainable, and resilient infrastructure; and
- Promoting inclusive and sustainable industrialization.

Other UN initiatives that relate to this goal involve upgrading infrastructure and retrofitting industries to make them more sustainable, enhancing scientific research, upgrading the technological capabilities of industrial sectors in all countries, and substantially increasing the number of research and development workers per one million people.

Countries around the world are encouraged to facilitate sustainable and resilient infrastructure through enhanced financial and technical support, the promotion of research and innovation in developing countries, and increased access to information and communications technology.

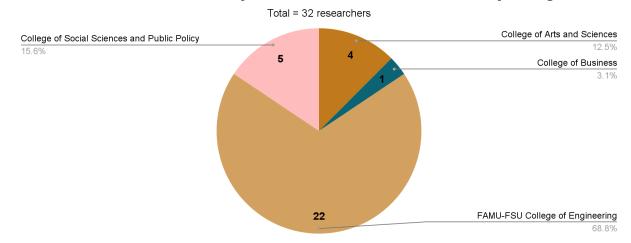
Sustainable Campus identified 32 sustainability researchers and 43 sustainability courses relevant to SDG 9 throughout the university.

Faculty members address SDG 9 by researching topics such as transportation systems resilience, smart materials, unmanned aerial system datasets, experimental robotics, and technology adoption in middle-aged and older adults.

Students can learn more about SDG 9 through courses that address mass media, transportation planning, Geographic Information Systems, sustainable development in Latin America, public decision making, and capital intensive infrastructure systems, among other topics.

Figure 21: Number of Sustainability Researchers that Address SDG 9 by College

Twenty two sustainability researchers associated with the FAMU-FSU College of Engineering were found to address SDG 9 in their work. The College of Social Sciences and Public Policy had five researchers, the College of Arts and Sciences had four researchers, and the College of Business had one researcher.





Source: FSU Sustainability Research Inventory

Faculty Spotlight



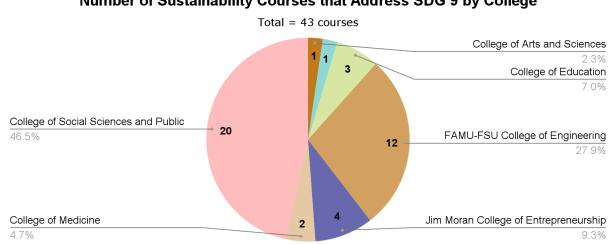
Dr. Eren Ozguven is an Associate Professor of Civil and Environmental Engineering at the FAMU-FSU College of Engineering and Director of the RIDER Center. His research focus is on the relationships among different infrastructure networks in Florida and how that contributes to an area's ability to be prepared for disasters, such as hurricanes. You can learn more about Dr. Ozguven <u>here</u>.

Dr. Daniel Hallinan is an Associate Professor of Chemical and Biomedical Engineering at the FAMU-FSU College of Engineering. His research team studies polymers for advanced energy sustainability. Other areas of sustainability that motivate his research include membrane-based water desalination and carbon dioxide capture. You can learn more about Dr. Hallinan here.



Figure 22: Number of Sustainability Courses that Address SDG 9 by College

The two highest performing colleges in terms of SDG 9 are the College of Social Sciences and Public Policy, with twenty sustainability courses related to industry, innovation and infrastructure, followed by the FAMU-FSU College of Engineering with twelve courses.



Number of Sustainability Courses that Address SDG 9 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

New Media and Social Change (SYO4461) is an undergraduate course in the Sociology department of the College of Social Sciences and Public Policy. The course aims to survey some of the research outlining the influence of mass media on individuals, institutions, and culture. The course pays attention to both "old" media (e.g., television and newspapers) and "new" media (e.g., websites, and social media) and broadly explores how technological changes effect social institutions and society.

Planning for Community Infrastructure (URP5371) is a graduate level course in the Urban and Regional Planning department of the College of Social Sciences and Public Policy. This course examines issues and techniques in planning for community infrastructure. Emphasis is placed on capital intensive infrastructure systems, but other services and facilities are also covered. Considerable attention is devoted to analyzing variations in demand for infrastructure associated with land use types, intensities, and spatial form.

The Resilient Infrastructure & Disaster Response Center (RIDER) promotes allinclusive and equitable disaster resilience for vulnerable populations. RIDER leverages technology, data, and multidisciplinary research with a deep understanding of how the unique conditions of each community's physical and social dynamics, available infrastructure, and land use affect resilience (RIDER, n.d.).



Summary

The goal of SDG 10: Reduced Inequalities is to reduce inequality within and among countries. The main target for this goal is to empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

To meet this goal, the UN encourages countries to ensure equal opportunity and enhanced representation, reduce inequalities of outcome, and facilitate the orderly, safe, regular and responsible migration and mobility of people.

Other sub-targets of SDG 10 include implementing the principle of special and differential treatment for developing countries; encouraging official development assistance and financial flows; and reducing the transaction costs of migrant remittances.

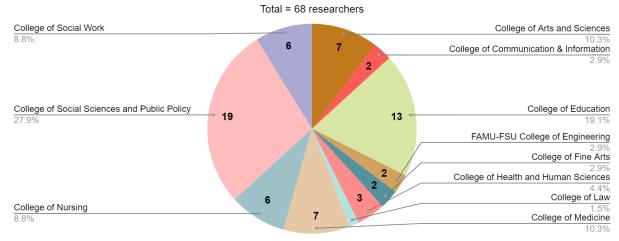
Sustainable Campus identified 68 sustainability researchers and 65 sustainability courses relevant to SDG 10 throughout the university.

Faculty members address SDG 10 by developing partnerships with low-resource communities of color and researching topics such as inclusive spaces, interracial relationships, human migration, stuctural racism, culturally relevant education, and the social vulnerability index, among other topics.

Courses address SDG 10 through the lens of multicultural urbanism, international disaster management, international social work, African-American culture, social welfare, nursing and vulnerable populations, and cultural representation, among other topics.

Figure 23: Number of Sustainability Researchers that Address SDG 10 by College

The College of Social Sciences and Public Policy was found to have the most sustainability researchers that addressed SDG 10, with nineteen in total. The College of Education had thirteen researchers, and the Colleges of Arts and Sciences and Medicine had seven researchers.



Number of Sustainability Researchers that Address SDG 10 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



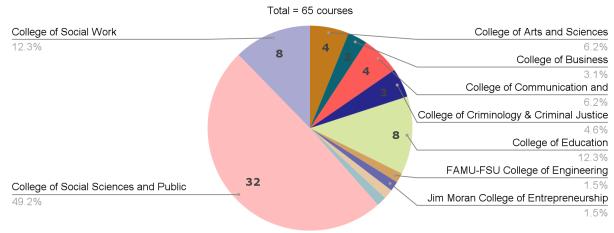
Dr. Sandy Wong is an Assistant Professor of Public Health in the College of Social Sciences and Public Policy. She studies how our social, built, and natural environments influence the well-being of marginalized communities. Her current research interests include green space access for people with disabilities and inequalities in healthcare access. You can learn more about Dr. Wong here.

Dr. Petra Doan is a Professor and PhD Program Director of Urban and Regional Planning in the College of Social Sciences and Public Policy. She is interested in planning for marginal communities in less developed areas. Dr. Doan is also involved in research on planning for non-normative populations and the development and demise of queer space (LGBT neighborhoods). You can learn more about Dr. Doan here.



Figure 24: Number of Sustainability Courses that Address SDG 10 by College

The College of Social Sciences and Public Policy was found to offer thirty two sustainability courses relevant to SDG 10. The Colleges of Social Work and Education offer eight courses, while the Colleges of Arts and Sciences and Communication and Information offer four.



Number of Sustainability Courses that Address SDG 10 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Culture and Society (SYD 3374) is an undergraduate course in the Sociology department of the College of Social Sciences and Public Policy. Students are introduced to sociological, feminist, critical race, and queer theoretical perspectives on "taste," power, and cultural representation, emphasizing how culture shapes our experiences and understandings of socially constructed phenomena such as class, race, sexuality, and gender.

Diversity and Social Justice (SOW 4620) is an undergraduate course in the College of Social Work. This course enhances student understanding of human diversity and prepares students to engage in a lifetime pursuit of cultural competence. Students are encouraged to reflect upon and discuss the intricacies of their own particular dominant and/or minority social statuses and their relations to other individuals and communities. The course is designed to train students to apply theoretical frameworks to the forms and mechanisms associated with diversity, differences, and oppression.

The Center for Academic Retention and Enhancement (CARE) was created at Florida State University in 1968. CARE operates to provide equity and access to students with identities traditionally underrepresented in higher education. CARE serves as a partner for these students in navigating barriers that exist for them based on educational and socioeconomic circumstances (CARE, n.d.).

The President's Council on Equity, Diversity, and Inclusion is a body comprised of FSU faculty, staff, students, and alumni that work to ensure that FSU creates and maintains a diverse, inclusive, and equitable campus for all members of the Florida State community (Diversity & Inclusion, n.d.).

The Social Justice Living-Learning Community (SJLLC) is designed for students of all majors who desire to engage in meaningful, intentional, and open discussion on many societal issues. SJLLC, colloquially known as SoJust, is made up of up to 30 students who participate in this supportive, inclusive community. "SoJusters" challenge existing beliefs and opinions by participating in discussions with diverse groups of students (The Center for Leadership & Social Change, n.d.).

1 SUSTAINABLE CITIES AND COMMUNITIES



Summary

SDG 11: Sustainable Cities and Communities aims to make cities inclusive, safe, resilient, and sustainable. The targets for this goal include:

- Reducing the adverse environmental impact of cities and the negative effects caused by disasters;
- Protecting the world's cultural and natural heritage; and
- Enhancing inclusive and sustainable urbanization.

To meet this goal, the UN encourages countries to provide access to affordable housing, basic services, green spaces, and transport systems. This initiative also requires countries to examine the relationships between their urban and rural areas and implement policy changes towards these targets.

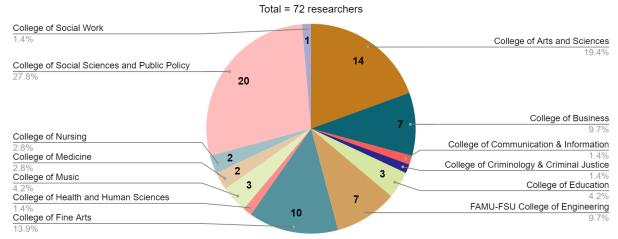
Sustainable Campus identified 72 sustainability researchers and 148 sustainability courses relevant to SDG 11 throughout the university.

Faculty members address SDG 11 by researching development in the Amazon, homelessness, transit oriented development, neighborhood crime rates, the housing market, community capacity building, urban and rural community relationships, and planning for inclusive spaces, among other topics.

Students can learn to better address SDG 11 through topics such as coastal environmental planning, Geographic Information Systems, transportation, demographic change, modern disaster response operations, community-based programs, and sustainable design, among many other topics.

Figure 25: Number of Sustainability Researchers that Address SDG 11 by College

The College of Social Sciences and Public Policy was found to have twenty sustainability researchers that addressed SDG 11 in their publications and projects. The College of Arts and Sciences had fourteen researchers; the College of Fine Arts had ten researchers; and the Colleges of Business and Engineering had seven researchers.



Number of Sustainability Researchers that Address SDG 11 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



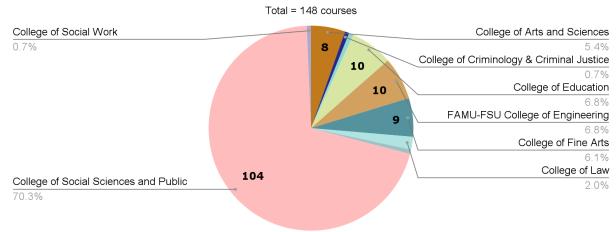
Dr. Horacio Rousseau is an Assistant Professor of Strategy and Entrepreneurship in the Department of Management at FSU's College of Business. His main research focuses on sustainable development. You can learn more about Dr. Rousseau and his recent publication, *Localizing Sustainable Development Goals: Nonprofit Density and City Sustainability*, <u>here</u>.

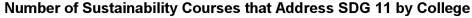
Meghan Mick is an Assistant Professor of Interior Architecture and Design in the College of Fine Arts. Her research interests include the role of environmental graphics in place making and biophilic design to further connect indoor and outdoor environments for the health and well-being of people and the natural world. Read more about Professor Mick <u>here</u>.



Figure 26: Number of Sustainability Courses that Address SDG 11 by College

The College of Social Sciences and Public Policy had a total of 104 sustainability courses that were relevant to SDG 11. The Colleges of Criminology and Education each had ten courses, while the College of Engineering had nine courses, and the College of Arts and Sciences had eight courses.





Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Sustainable Society (IDS 2227) is an undergraduate course in the Geography department of the College of Social Sciences and Public Policy. The course provides students with the opportunity to observe and inquire about sustainable practices. Students engage in critical thinking about the sustainability of human society and the environment from various aspects, which include producers, consumers, public-service sectors, and policy makers.

Introduction to Transportation Planning (URP 5355) is a graduate level course in the Urban and Regional Planning department of the College of Social Sciences and Public Policy. It provides an overview of the broad area of international transportation planning. The course features analyses of a number of specific case studies of transportation planning from around the world, including from Europe, Canada, China, India, Russia, Africa and the developing world. It includes analytical exercises that are relevant to growing international transportation planning challenges.

The Mark & Marianne Barnebey Planning & Development Lab is a nationallyrecognized resource which utilizes Florida as a laboratory and draws upon the academic and professional resources of Florida State University to connect with public and private partners to provide capacity and innovative planning for the sustainable growth and long-term viability of Florida communities (Barneby Planning & Development Lab, n.d.).

The Florida Resources and Environmental Analysis Center (FREAC) is an applied research center of Florida State University. FREAC specializes in facilitating the understanding and implementation of spatial information within communities and local governments. FREAC houses the Florida Natural Areas Inventory and is a leader in conservation planning, mapping, inventory and analysis (FREAC, n.d.).

reCycle Bike is a bicycle rental program offering affordable transportation and educational events for students. The complete rental package includes a refurbished bicycle, lock, helmet, front and rear lights, basic repairs, safety classes, maintenance workshops, and social rides (Sustainable Campus, n.d.-c).

The Sustainability and Governance Lab is an interdisciplinary research hub that investigates the planning, adoption, implementation, and effectiveness of policies and programs that promote sustainable development. In the Land Use Policy area, researchers study 1) local adoption of various growth management programs and 2) effective growth management programs in curbing urban sprawl (Sustainability and Governance Lab, n.d.-c). In the Smart Cities and Digital Governance area, researchers study 1) smart city technology adoption and 2) how smart city technologies affect public service delivery (Sustainability and Governance Lab, n.d.-d).

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Summary

SDG 12: Responsible Consumption and Production aims to ensure sustainable consumption and production patterns across the globe. The targets to reach this goal include:

- Reducing waste generation; and
- Sustainably managing the use of natural and chemical resources.

This goal can and should be achieved by providing education on living in harmony with nature, strengthening scientific capacity in developing countries, and developing tools to monitor sustainable consumption and production. To meet these targets, the UN discourages countries from adopting inefficient fossil-fuel subsidies.

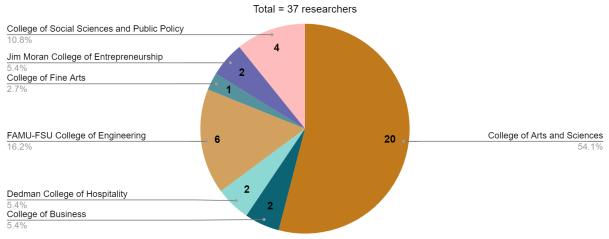
Sustainable Campus identified 37 sustainability researchers and 59 sustainability courses relevant to SDG 12 throughout the university.

Faculty members address SDG 12 by researching sustainable product development, solvent extraction, nuclear resources, environmental inequality, conservation, public good demand, and landfill leachate, among other topics.

Courses cover SDG 12 through topics such as air pollution, polymer chemistry, remediation engineering, environmental engineering, marine conservation, sustainable food and water practices, hydrology, population economics, microbiology, forager societies, and conservation biology.

Figure 27: Number of Sustainability Researchers that Address SDG 12 by College

The College of Arts and Sciences was found to have twenty sustainability researchers working on publications and projects related to SDG 12. The FAMU-FSU College of Engineering had six researchers, the College of Social Sciences and Public Policy had four researchers, and the Colleges of Engineering, Hospitality, and Business each had two researchers.



Number of Sustainability Researchers that Address SDG 12 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. Tarek Abichou is a Professor of Civil and Environmental Engineering in the FAMU-FSU College of Engineering. He has investigated alternative ways to cover solid waste facilities for more than 25 years. Dr. Abichou is also known for his research examining the mitigation of greenhouse gas emissions from landfills. You can read more about Dr. Abichou <u>here</u>.

Dr. Justin Kennemur is an Associate Professor of Chemistry in the College of Arts and Sciences. He researches sustainable plastics composed of chiral biomass-based feedstock. His team also examines advanced elastomeric and super-soft materials with enhanced recyclability. Learn more about Dr. Kennemur <u>here</u>.

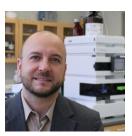
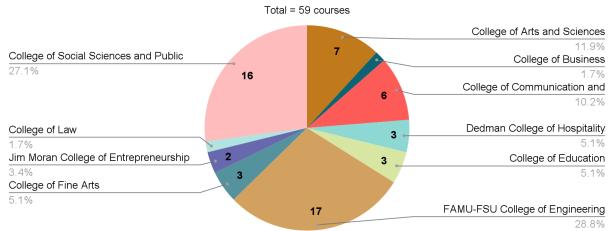


Figure 28: Number of Sustainability Courses that Address SDG 12 by College

The FAMU-FSU College of Engineering had the highest number of sustainability courses relevant to SDG 12 with a total of seventeen courses. The College of Social Sciences and Public Policy had sixteen courses, while the College of Arts and Sciences had seven courses, and the College of Communication and Information had six courses.



Number of Sustainability Courses that Address SDG 12 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Remediation Engineering (ENV 4022) is an undergraduate Civil and Environmental Engineering course (FAMU-FSU College of Engineering) that reviews various innovative remediation technologies used for cleanup of contaminated soil and groundwater at a site such as air sparging, soil vapor extraction, reactive walls, reactive zones, stabilization technologies, as well as hydraulic and pneumatic fracturing pump-and-treat systems.

Forager Societies (ANG 5111) is a graduate level course in the Anthropology department of the College of Arts and Sciences. This course focuses on human societies throughout the world that have lived by hunting and gathering wild resources. The course examines specific subsistence strategies of a wide range of hunter-gatherer groups, relative to their technology, social structure, territory, demography and interaction with food producers in both the archaeological record and through ethnography.

Garnet & Gold Goes Green (G4) is FSU's game day recycling program. Student volunteers act as a friendly face by giving fans the opportunity to recycle with the intention of keeping Doak Campbell Stadium beautiful and promoting eco-friendly behavior. Since 2005, G4 has collected over 200 tons of recyclable material (Sustainable Campus, n.d.-b).





Summary

The goal of SDG 13: Climate Action is to take urgent steps to combat climate change and its impacts. To this end, the UN encourages countries to strengthen their resilience and adaptive capacity to climate-related hazards as well as integrate climate change measures into national policies. Improving education, awareness, and human/institutional capacity related to climate change are also ways that countries can advance this goal.

Other initiatives related to SDG 13 include fully operationalizing the Green Climate Fund and developing capacity for effective climate change-related planning and management in the least developed countries and small island developing states. The UN is specifically focused on increasing the ability of women, youth, and marginalized communities to contribute to these efforts.

Sustainable Campus identified 96 sustainability researchers and 81 sustainability courses relevant to SDG 13 throughout the university.

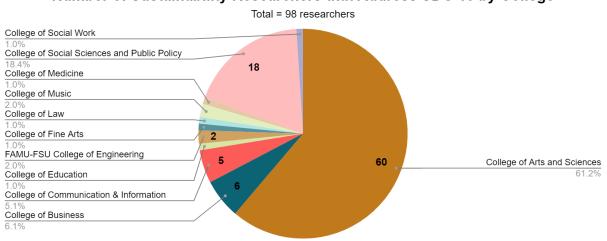
Faculty members address SDG 13 by researching hurricane and disaster resilience, aquatic geochemistry, people-centered natural climate solutions, rare and endangered species, global climate modeling, rural and urban farming, sea turtle nests, the Gulf of Mexico, ice shelf collapse, and carbon biogeochemistry, among other topics.

Courses address SDG 13 through topics such as climate change and storms, marine conservation biology, eco-literature, environmental ethics, meteorology, environmental hazards, marine pollution, atmospheric chemistry, and environmental Geographic Information Systems, among other topics.

Research

Figure 29: Number of Sustainability Researchers that Address SDG 13 by College

The College of Arts and Sciences was found to have the highest number of sustainability researchers whose work addressed SDG 13, with 60 researchers in total. The College of Social Sciences and Public Policy had 18 researchers, while the College of Business had six researchers, the College of Communication and Information had five researchers, and the FAMU-FSU College of Engineering had two researchers.



Number of Sustainability Researchers that Address SDG 13 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. Tisha Holmes is an Assistant Professor of Urban and Regional Planning in the College of Social Sciences and Public Policy. Dr. Holmes seeks sustainable pathways to reducing risk and building socio-ecological resilience to hazards. Dr. Holmes advances inclusive and socially just solutions to environmental problems faced by marginalized groups. Read more about Dr. Holmes <u>here</u>.

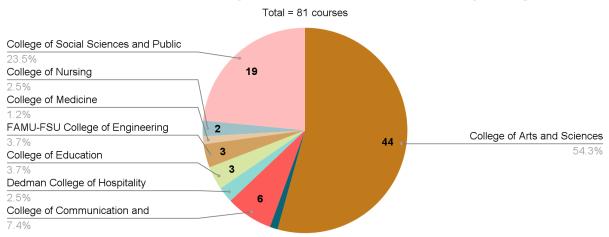
Dr. Shi-Ling Hsu is the D'Alemberte Professor at the College of Law. He is an expert in the areas of environmental and natural resource law, climate change, law and economics, and property. You can read more about Dr. Hsu and his recent book, *Capitalism and the Environment: A Proposal to Save the Planet, here.*



Teaching

Figure 30: Number of Sustainability Courses that Address SDG 13 by College

The College of Arts and Sciences also had the highest number of sustainability courses relevant to SDG 13, with 44 courses across all departments. The College of Social Sciences and Public Policy had 19 courses, the College of Communication and Information had six courses, and the Colleges of Education and Hospitality had three courses.



Number of Sustainability Courses that Address SDG 13 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Sustainable Public Discourse (HUM 2937) is an undergraduate English course in the College of Arts and Sciences. Known alternatively as "ecospeak," "popular science," and "science-based CSR," the phenomenon of moving scientific facts into the public sphere is one that deserves our critical attention. Literally speaking, the course examines academic and real-world genres that advocate for sustainability. Figuratively speaking, the course considera specific paradigms in written communication that perpetuate, devolve, or recycle themselves over time.

Climate Change Science (MET 3103C) is an Earth, Ocean, and Atmospheric Science course in the College of Arts and Sciences. This course enables students to explore the science behind our understanding of climate change. The course provides an in-depth exploration of the use of proxy, in situ, remote-sensing data, climate models, and their public policy implications. Students gain experience in evaluating internal and external forcings on the climate system and make quantitative assessments of change.

Campus Programs

The Center for Ocean-Atmospheric Prediction Studies (COAPS) promotes interdisciplinary research in air-sea interaction, the coupled ocean-atmosphere-land-ice earth system, and climate prediction on scales of weeks to decades in order to increase our understanding of the physical, social, and economical consequences of coupled ocean-atmospheric variations (COAPS, n.d.).

The Florida Climate Institute (FCI) is a multi-disciplinary network of national and international research and public organizations, scientists, and individuals concerned with achieving a better understanding of climate variability and change (FCI, n.d.)





Summary

The goal of SDG 14: Life Below Water is to conserve and sustainably use the oceans, seas, and marine resources for sustainable development. To advance this goal, the UN encourages all countries to prevent marine pollution of all kinds, sustainably manage and protect marine and coastal ecosystems, and minimize and address the impacts of ocean acidification.

Other important targets of SDG 14 include the eradication of illegal, unreported, unregulated, and excessive fishing; the eradication of harmful fishing subsidies; and the creation of economic benefits for small island developing states that implement the sustainable use of marine resources. Countries can also advance SDG 14 by increasing scientific knowledge on marine resources in general and implementing international laws for the conservation and sustainable use of oceans around the globe.

Sustainable Campus identified 57 sustainability researchers and 65 sustainability courses relevant to SDG 14 throughout the university.

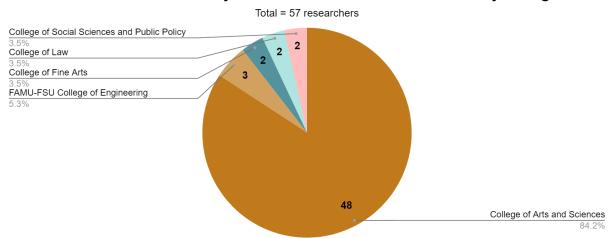
Faculty members address SDG 14 by researching Apalachicola Bay, meiofauna and nematodes, private water allocation, coral reef ecosystems, ocean-ice interactions, deep ocean extreme communities, and global ocean circulation, among other topics.

Courses address SDG 14 through topics such as aquatic chemistry, marine field methods, coastal ecology, hydrogeology, river basin planning, oceanic law, and marine pollution.

Research

Figure 31: Number of Sustainability Researchers that Address SDG 14 by College

The College of Arts and Sciences had the highest number of sustainability researchers who addressed SDG 14 in their publications and projects with 48 researchers. The FAMU-FSU College of Engineering had three researchers, while the Colleges of Fine Arts, Law, and Social Sciences and Public Policy each had two researchers.



Number of Sustainability Researchers that Address SDG 14 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. Mariana Fuentes is an Associate Professor of Oceanography and Environmental Science in the College of Arts and Sciences. Her research addresses real-world issues related to the conservation and management of marine turtles and other marine megafauna. You can read more about Dr. Fuentes <u>here</u>.

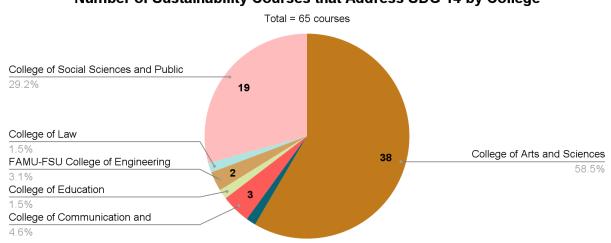
Dr. Sarah Lester is an Associate Professor of Geography in the College of Social Sciences and Public Policy. Her research addresses questions related to coastal and marine natural resource management, marine conservation science, ecosystem sustainability, and marine biogeography. You can read more about Dr. Lester <u>here</u>.



Teaching

Figure 32: Number of Sustainability Courses that Address SDG 14 by College

The College of Arts and Sciences had the highest number of sustainability courses applicable to SDG 14 with a total of 38 courses. The College of Social Sciences and Public Policy had 19 courses, while the College of Communication and Information had three courses, and the FAMU-FSU College of Engineering had two courses.





Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Coastal Ecology (OCB 4631) is an undergraduate Earth, Ocean, and Atmospheric Science course in the College of Arts and Sciences. This interdisciplinary course addresses the ecology of estuaries. The lectures address the general ecological principles that govern the productivity and diversity of estuaries, including their hydrodynamics, sedimentology, chemistry, as well as plant and animal community structure.

Marine Pollution (EOC 4631) is an undergraduate Earth, Ocean, and Atmospheric Science course in the College of Arts and Sciences. This course introduces students to chemical, physical, and biological aspects of dominant marine pollutants, including dissolved toxic metals, complex organic and inorganic contaminants, and particulate pollutants. Topics cover the sources and types of dominant contaminants, their key characteristics, their pathways, their impact on the environment, as well as approaches that could lead to the reduction or elimination of pollutants in the marine environment.

Campus Programs

The Apalachicola Bay System Initiative (ABSI) seeks to gain insight into the root causes of decline of the bay's ecosystem and the deterioration of oyster reefs. Ultimately, the ABSI will develop a management and restoration plan for the oyster reefs and the health of the bay (ABSI, n.d.).

The Coastal and Marine Laboratory (Marine Lab) conducts innovative, pioneering, interdisciplinary research on coastal and marine ecosystems, mentors the next generation of problem solvers, and leverages scientific outcomes and expertise through engagement with stakeholders to optimize marine management and conservation (Marine Lab, n.d.).

The Gulf Scholars Program is rooted in the grand vision of building a more just, equitable, sustainable, and resilient Gulf of Mexico region. This vision stems from the larger mission to recover from the 2010 Deepwater Horizon Oil Spill and prepare for additional social, economic, environmental, and climate stressors occurring throughout the region (FAMU-FSU College of Engineering, n.d.).





Summary

The goal of SDG 15: Life on Land is to protect, restore, and promote the sustainable use of terrestrial ecosystems. The UN encourages countries to sustainably manage their natural resources and reverse land degradation and biodiversity loss. Specific targets for this goal include:

- Promoting the implementation of sustainable management of all types of forests;
- Combating desertification;
- Restoring degraded land, natural habitats, and soil; and
- Taking urgent action to stop the loss of biodiversity.

Additionally, countries can advance SDG 15 by equitably sharing the benefits of utilizing genetic resources, taking action to end poaching, and significantly reducing the impact of invasive alien species. These goals can also be reached by integrating ecosystem and biodiversity values into national and local planning and development processes.

Sustainable Campus identified 44 sustainability researchers and 73 sustainability courses relevant to SDG 15 throughout the university.

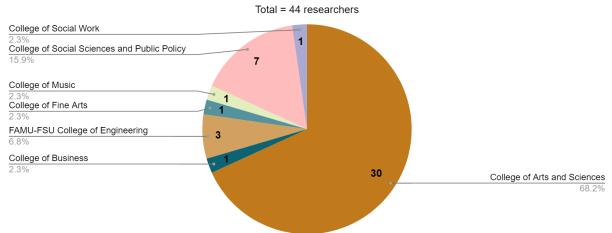
Faculty members address SDG 15 in their research by working on topics such as prescribed fires, farmland in metropolitan areas, dioecious threatened plants, the Mississippi River Delta, rare species, and bee phenology.

Students can learn more about working towards SDG 15 in courses that cover topics such as natural history, Earth systems and Earth science, landscape ecology, land use planning, environmental ethics, and conservation biology.

Research

Figure 33: Number of Sustainability Researchers that Address SDG 15 by College

The College of Arts and Sciences was found to have 30 sustainability researchers whose work was relevant to SDG 15. The College of Social Sciences and Public Policy had seven researchers, while the FAMU-FSU College of Engineering had three researchers and the Colleges of Social Work, Music, Fine Arts, and Business each had one researcher.



Number of Sustainability Researchers that Address SDG 15 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. Stephanie Pau is an Associate Professor of Geography in the College of Social Sciences and Public Policy. Her research investigates the diversity and productivity of forests, savannas, and grasslands and how they are impacted by climate change. You can read more about Dr. Pau <u>here</u>.

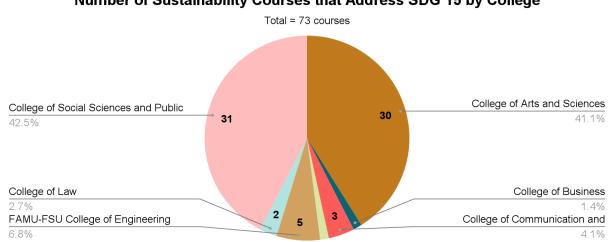
Dr. Denise Von Glahn is a Professor of Musicology in the College of Music. She has written on music, nature, and place in her books *The Sounds of Place: Music and the American Cultural Landscape* and *Music and the Skillful Listener: American Women Compose the Natural World.* You can read more about Dr. Von Glahn and her work related to environmental awareness <u>here</u>.



Teaching

Figure 34: Number of Sustainability Courses that Address SDG 15 by College

The College of Social Sciences and Public Policy was found to have the highest number of sustainability courses relevant to SDG 15 with 31 courses. The College of Arts and Sciences had 30 courses, while the FAMU-FSU College of Engineering had five courses, and the College of Communication and Information had three courses.



Number of Sustainability Courses that Address SDG 15 by College

Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Ecological Genetics (PCB 5615) is a graduate level Biological Science course in the College of Arts and Sciences. This course covers the fundamentals of modern ecological genetics. The course begins with an overview of genetic variation, its measurement, and the forces responsible for the origin and maintenance of variation within and among populations. The remainder of the course describes the ecological context of evolution, and the ecological and evolutionary forces that shape variation within and between populations. Emphasis is placed on experimental studies of natural populations, and the relationship between theory and experiments.

Landscape Ecology (GEO 5378) is a graduate level Geography course in the College of Social Sciences and Public Policy. This course offers a review of methods on analyzing geographic patterns of natural phenomena, including ecological conservation, natural resource management, landscape and urban planning, as well as humanenvironmental interaction and implications.

Campus Programs

The Department of Biological Sciences maintains greenhouses both on-campus and at an off-campus research facility. The greenhouse facilities support research in plant and animal ecology, population genetics, plant physiology, cell and molecular biology, and genetics. Some greenhouse space is reserved for a teaching collection, and for use in undergraduate biology courses (Department of Biological Science, n.d.).

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Summary

The goal of SDG 16: Peace, Justice and Strong Institutions is to promote peaceful and inclusive societies for sustainable development. To achieve this goal, the UN encourages countries to provide access to justice for everyone and to build effective, accountable, and inclusive institutions at all levels. This goal can and should be achieved through the following actions:

- Significantly reducing all forms of violence;
- Ending abuse, exploitation, and trafficking;
- Promoting the rule of law; and
- Reducing the flow of illicit arms and corruption.

Countries can also advance SDG 16 by developing accountable and effective institutions; ensuring inclusive representation and global governance as well as access to information and fundamental freedoms; and providing a legal identity for all.

Sustainable Campus identified 19 sustainability researchers and 95 sustainability courses relevant to SDG 16 throughout the university.

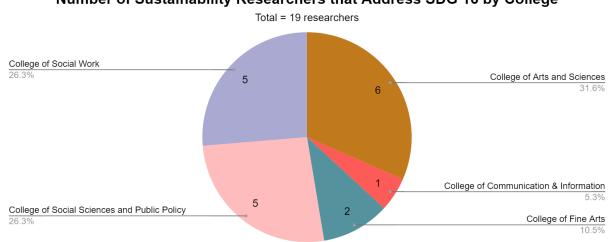
Faculty member address SDG 16 through researching topics such as terrorism, sexual exploitation, human rights and global ethics, child advocacy, and racial justice and food justice.

Students can learn more about SDG 16 through courses that explore topics such as political processes, the sociology of law, historic preservation, state politics, legislative advocacy, and social welfare policy.

Research

Figure 35: Number of Sustainability Researchers that Address SDG 16 by College

The College of Arts and Sciences was found to have six sustainability researchers that addressed SDG 16 in their work. The Colleges of Social Work and Social Sciences and Public Policy each had five researchers, while the College of Fine Arts had two researchers and the College of Communication and Information had one researcher.



Number of Sustainability Researchers that Address SDG 16 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. John Mathias is an Assistant Professor in the College of Social Work. His research concerns the intersection between environmental issues and social justice. Dr. Mathias also studies community organizing, civic engagement, and social movements. You can learn more about Dr. Mathias and his forthcoming publication, *Green Social Work for Environmental Justice*, here.

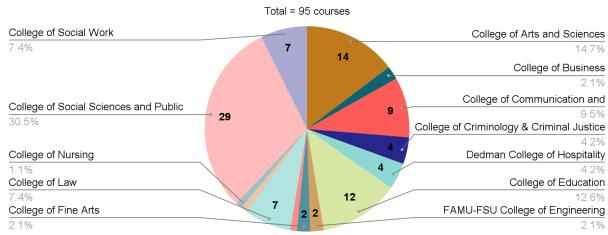
Dr. Tyler McCreary is an Assistant Professor of Geography in the College of Social Sciences and Public Policy. His research examines how settler colonialism and racial capitalism inflect processes of environmental, labor, and community governance in North America. You can read more about Dr. McCreary and his recent publication, *Race, Land, and the Law*, <u>here</u>.



Teaching

Figure 36: Number of Sustainability Courses that Address SDG 16 by College

The College of Social Sciences and Public Policy had the highest number of sustainability courses relevant to SDG 16 with 29 courses. The College of Arts and Sciences had 14 courses, while the College of Education had 12 courses.





Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

International Conflict and Terrorism (PAD 5839) is a graduate level course in the Public Administration and Policy department of the College of Social Sciences and Public Policy. This course introduces students to historical and ongoing conflicts around the world. Students explore how these conflicts have created terrorism and various tools to end both the conflict and the resulting terrorism. Students learn the drivers of conflict such as relative deprivation, dehumanization, and various politics.

Diversity and Social Justice (SOW 4620) is an undergraduate course in the College of Social Work. This course enhances student understanding of human diversity and prepares students to engage in a lifetime pursuit of cultural competence. Students are encouraged to reflect upon and discuss the intricacies of their own particular dominant and/or minority social statuses and their relations to other individuals and communities. The course is designed to train students to apply theoretical frameworks to the forms and mechanisms associated with diversity, differences, and oppression.

Campus Programs

The Center for Environmental, Energy, and Land Use Law aims to enhance the FSU College of Law's nationally ranked programs, which are taught by nationally recognized legal experts who produce impactful scholarship and provide a first-rate education to law students concentrating in areas of law relating to the environment; to engage in pioneering research and enrichment events that will help develop cutting-edge scholarship and policy; and to marshal legal skills for addressing challenges in the areas of environmental, land use, energy and natural resources law (College of Law, n.d.).





Summary

The goal of SDG 17: Partnerships for the Goals is to strengthen the means of implementation and revitalize the global partnership for sustainable development. Targets for this goal include:

- Strengthening domestic resource mobilization;
- Official assistance by developed countries for the least developed countries;
- Long term debt sustainability; and
- International cooperation.

Countries can also advance SDG 17 through the dissemination of environmentally sound technologies and capacity-building mechanisms. The UN also encourages countries to develop equitable, multilateral trading systems, duty-free market access, and enhanced policy coherence. Finally, SDG 17 involves mutual respect among countries, effective partnerships, and enhanced capacity building support.

Sustainable Campus identified 12 sustainability researchers and 56 sustainability courses relevant to SDG 17 throughout the university.

Faculty members address SDG 17 by researching topics such as intergovernmental

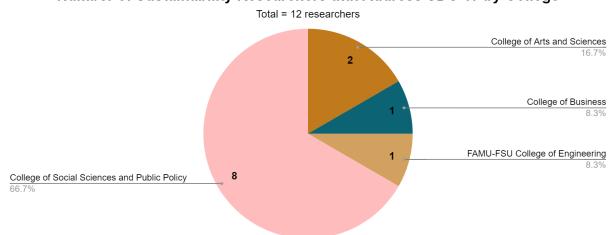
grants, collective action, religious ethics, public-private partnerships, and strategic management.

Students can take courses on topics such as wicked problems, public administration, non-governmental organizations, international development education, strategies for least developed countries, comprehensive planning and growth management, world cities, food systems, sustainable development, and global leadership to gain a stronger understanding of ways to achieve SDG 17.

Research

Figure 37: Number of Sustainability Researchers that Address SDG 17 by College

The College of Social Sciences and Public Policy had the highest number of sustainability researchers whose work was relevant to SDG 17 with eight researchers. The College of Arts and Sciences had two researchers, and the Colleges of Business and the FAMU-FSU College of Engineering each had one researcher.



Number of Sustainability Researchers that Address SDG 17 by College

Source: FSU Sustainability Research Inventory

Faculty Spotlight



Dr. Eric Coleman is an Associate Professor in the Political Science department of the College of Social Sciences and Public Policy. He studies how and why people act collectively to solve environmental problems. Dr. Coleman's research extends our knowledge of environmental governance by measuring and quantifying the effects that policy has on the sustainable use of resources. Read more about

Dr. Coleman here.

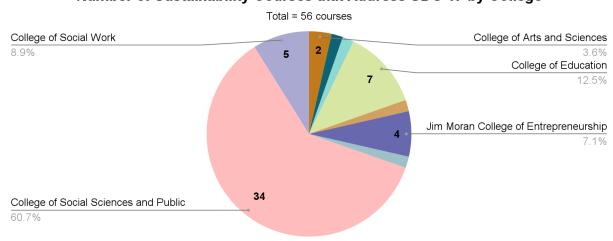
Dr. Kassie Ernst is a First-Year Engineering Faculty in the College of Engineering. Her research interests include climate change adaptation and science co-production. Dr. Ernst is the Director of the FSU Gulf Scholars Program, which provides students with an opportunity to work effectively on climate-related issues in the Gulf region across disciplines, cultures, and communities. Read more about Dr. Ernst <u>here</u>.



Teaching

Figure 38: Number of Sustainability Courses that Address SDG 17 by College

The College of Social Sciences and Public Policy had 34 sustainability courses relevant to SDG 17. The College of Education had seven courses, the College of Social Work had five courses, the College of Entrepreneurship had four courses, and the College of Arts and Sciences had two courses.





Source: FSU Sustainable Course Guide 2018-2020

Course Spotlight

Introduction to Development Planning (URP 5610) is a graduate level Urban and Regional Planning course in the College of Social Sciences and Public Policy. This course analyzes the problems of developing countries as integral parts of a more general process of the development of human societies on a global scale. The process of development is examined by a focus on the set of conditions leading to problems of development in most societies.

Collaborative Governance (URP 5123) is a graduate level Urban and Regional Planning course in the College of Social Sciences and Public Policy. This course prepares students to effectively build censuses and to resolve conflicts involving building permits, locally unwanted land uses, environmental regulations, community visions, projects, programs, allocation of public funds and services, intergovernmental battles, and controversial agency rules.

Campus Programs

Broader Impacts is a term used by the National Science Foundation, and other research funding agencies, to talk about how a researcher's work will impact more than just their scientific field. Broader impacts are usually related to promoting teaching, training, and learning, or broadening the participation of underrepresented groups. FSU faculty and staff can get involved with organizations at FSU and in the Tallahassee community (Office of Research Development, n.d.).

References

Academic Center for Excellence. (n.d.). About Us. *Ace.fsu.edu.* Retrieved from https://ace.fsu.edu/about-us.

Apalachicola Bay System Initiative. (n.d.). ABSI Mission. *Marinelab.fsu.edu.* Retrieved from https://marinelab.fsu.edu/absi/.

Association for the Advancement of Sustainability in Higher Education (AASHE). (2017). United Nations Sustainable Development Goals and Targets. *AASHE.org*. Retrieved from https://www.aashe.org/wp-content/uploads/2017/09/un_sdgs_and_targets.pdf.

Association for the Advancement of Sustainability in Higher Education (AASHE). (2019). AC 9: Research and Scholarship. *STARS 2.2 Technical Manual,* 1-4. Retrieved from https://drive.google.com/file/d/1ZNhhLhuqDoyZNgfZSA2oGozCv3VpbU9v/view.

Barneby Planning & Development Lab. (n.d.). What We Do. *Coss.fsu.edu.* Retrieved from https://coss.fsu.edu/barn/.

Campus Recreation. (n.d.). Memberships. *Campusrec.fsu.edu.* Retrieved from https://campusrec.fsu.edu/memberships/.

Center for Academic Retention & Enhancement. (n.d.). Unconquered Scholars Program. *Care.fsu.edu.* Retrieved from https://care.fsu.edu/UnconqueredScholars.

Center for Advanced Power Systems. (n.d.). Home. *Caps.fsu.edu.* Retrieved from https://www.caps.fsu.edu/.

Center for the Advancement of Teaching. (n.d.). Home. *Teaching.fsu.edu.* Retrieved from https://teaching.fsu.edu/.

Center for Economic Forecasting and Analysis (CEFA). (n.d.). CEFA Mission. *Cefa.fsu.edu.* Retrieved from https://cefa.fsu.edu/.

Center for Leadership & Social Change. (n.d.). Social Justice Living Learning Community. *Thecenter.fsu.edu.* Retrieved from https://thecenter.fsu.edu/diversity/socialjustice-living-learning-community,

Center for Ocean-Atmospheric Prediction Studies (COAPS). (n.d.). About Us. *Coaps.fsu.edu.* Retrieved from https://www.coaps.fsu.edu/about-us.

CHAW. (n.d.). CHAW: Center for Health Advocacy and Wellness. *Chaw.fsu.edu.* Retrieved from https://chaw.fsu.edu/.

Coastal and Marine Laboratory (Marine Lab). (n.d.). About. *Marinelab.fsu.edu.* Retrieved from https://marinelab.fsu.edu/about/.

College of Law. (n.d.). Center for Environmental, Energy and Land Use Law. *Law.fsu.edu.* Retrieved from https://law.fsu.edu/academics/center-environmental-energy-and-land-use-law.

Counseling & Psychological Services at Florida State University. (n.d.). Home. *Counseling.fsu.edu.* Retrieved from https://counseling.fsu.edu/.

Department of Biological Science. (n.d.). Greenhouse Facilities Maps. *Bio.fsu.edu.* Retrieved from https://www.bio.fsu.edu/greenhouse/.

Department of Student Support and Transitions. (n.d.). Food for Thought Pantry. *Dsst.fsu.edu.* Retrieved from https://dsst.fsu.edu/resources/food-for-thought-pantry.

Diversity & Inclusion. (n.d.). President's Council on Equity, Diversity & Inclusion. *Diversity.fsu.edu.* Retrieved from https://diversity.fsu.edu/about-us/presidents-council.

Energy & Sustainability Center. (2006). Home. *Esc.fsu.edu.* Retrieved from https://esc.fsu.edu/homepage.html.

FAMU-FSU College of Engineering. (n.d.). Gulf Scholars Program. *Eng.famu.fsu.edu.* Retrieved from https://www.eng.famu.fsu.edu/index.php/gulf-scholars-program.

Farnum-Patronis, A. (2021, Sep 13). Student success powers FSU's Top 20 ranking by U.S. News & World Report. *Florida State University News*. Retrieved from https://news.fsu.edu/news/university-news/2021/09/13/student-success-powers-fsus-top-20-ranking-by-u-s-news-world-report/.

Florida Climate Institute. (n.d.). Who We Are. *Fsu.floridaclimateinstitute.org.* Retrieved from https://fsu.floridaclimateinstitute.org/about.

Florida Resources and Environmental Analysis Center (FREAC). (n.d.). About FREAC. *Freac.fsu.edu.* Retrieved from https://freac.fsu.edu/index.html.

Florida State University. (n.d.-a). About FSU. *Fsu.edu.* Retrieved from https://www.fsu.edu/about/.

Florida State University. (n.d.-b). FSU Highlights & Rankings. *Fsu.edu.* Retrieved from https://www.fsu.edu/highlights/.

Florida State University. (n.d.-c). History. *Fsu.edu.* Retrieved from https://www.fsu.edu/about/history.html.

Florida State University. (2017). The Future is Florida State: Florida State University Strategic Plan, 2017-2022. *Strategicplan.fsu.edu.* Retrieved from https://strategicplan.fsu.edu/wp-content/uploads/2018/12/FSU-Strategic-Plan.pdf.

FSU Women in Entrepreneurship. (n.d.). FSU Women in Entrepreneurship. *Facebook.com.* Retrieved from https://www.facebook.com/FSUWomeninEntrepreneurship/.

Goodall, M. & Moore, E. (2019). Yale Scholarship and the Sustainable Development Goals. *Sustainability.yale.edu*. Retrieved from https://sustainability.yale.edu/sites/default/files/files/Yale%20Scholarship%20and%20th e%20Sustainable%20Development%20Goals.pdf.

Office of Business Services. (n.d.). Round Up for FSU. *Obs.fsu.edu.* Retrieved from https://obs.fsu.edu/roundup.

Office of Research Development (n.d.). Broader Impacts @ FSU. *Research.fsu.edu.* Retrieved from https://www.research.fsu.edu/research-offices/ord/rd-resources-and-services/broader-impacts/.

Pable, J., McLane, Y., & Trujillo, L. (2021). Homelessness and the Built Environment: Designing for Unhoused Persons. Routledge.

Program for Instructional Excellence (PIE). (n.d.). The Program for Instructional Excellence. *Pie.fsu.edu.* Retrieved from https://pie.fsu.edu/.

Resilient Infrastructure & Disaster Response Center (RIDER). (n.d.). About Us. *Rider.eng.famu.fsu.edu.* Retrieved from https://rider.eng.famu.fsu.edu/about.

Sawyer. (2021, Sep 24). College Magazine: CM's Top 10 Organizations Changing the World at Florida State University. *Sawyer.com.* Retrieved from

https://www.sawyer.com/blog/college-magazine-cms-top-10-organizations-changing-the-world-at-florida-state-university.

Sustainability and Governance Lab. (n.d.-a). Clean Energy Innovation and Policy. *Coss.fsu.edu.* Retrieved from https://coss.fsu.edu/sglab/clean-energy-innovation-policy/.

Sustainability and Governance Lab. (n.d.-b). Economic Development. *Coss.fsu.edu.* Retrieved from https://coss.fsu.edu/sglab/economic-development/.

Sustainability and Governance Lab. (n.d.-c). Land Use Policy. *Coss.fsu.edu.* Retrieved from https://coss.fsu.edu/sglab/land-use-policy/.

Sustainability and Governance Lab. (n.d.-d). Smart Cities and Digital Governance. *Coss.fsu.edu.* Retrieved from https://coss.fsu.edu/sglab/smart-cities-and-digital-governance/.

Sustainable Campus. (n.d.-a). Food Recovery Network. *Sustainable Campus.* Retrieved from https://sustainablecampus.fsu.edu/students/food-recovery-network-frn.

Sustainable Campus. (n.d.-b). Garnet & Gold Goes Green. *Sustainable Campus.* Retrieved from https://sustainablecampus.fsu.edu/students/garnet-gold-goes-green-g4.

Sustainable Campus. (n.d.-c). reCycle Bike. *Sustainable Campus.* Retrieved from https://sustainablecampus.fsu.edu/students/get-involved/recycle-bike.

Sustainable Campus. (n.d.-d). Seminole Organic Garden. *Sustainable Campus.* Retrieved from https://sustainablecampus.fsu.edu/students/seminole-organic-garden.

Tsinghua University. (2021). Tsinghua University Report on Sustainable Development Goals. *Tsinghua.edu.cn.* Retrieved from https://www.tsinghua.edu.cn/en/Tsinghua_University_Report_on_Sustainable_Develop

https://www.tsinghua.edu.cn/en/Tsinghua_University_Report_on_Sustainable_Develop ment_Goals.pdf.

University of Auckland. (2021). A Heart in the Pacific With a Global Outlook: The University of Auckland SDG Report 2021. *Cdn.auckland.ac.nz.* Retrieved from https://cdn.auckland.ac.nz/assets/auckland/about-us/the-university/sustainability-and-environment/sustainability-development-goals/SDG%20Report%202021.pdf.

University of California Davis (UC Davis). (2021). Voluntary University Review on the UN Sustainable Development Goals (SDGs). *Ucdavis.app.box.* Retrieved from

https://ucdavis.app.box.com/s/qkpoxsvjssofv3unel7ei3jwjhn5c9kc.

United Nations. (n.d.). History. Sdgs.un.org. Retrieved from https://sdgs.un.org/goals.

Women in Math, Science & Engineering (WIMSE). (n.d.). Women in Math, Science, & Engineering. *Wimse.fsu.edu*. Retrieved from https://wimse.fsu.edu/.

Appendices

Appendix A: Methodology

Developing the FSU Sustainability Research Inventory

To meet the requirements of Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment & Rating System (STARS), Sustainable Campus staff developed the FSU Sustainability Research Inventory.

The inventory aims to identify:

- The number of employees engaged in sustainability research; and
- The number of academic departments that include at least one employee who conducts sustainability research.

According to AASHE, "Any level of sustainability research is sufficient to be included for this credit. In other words, a researcher who conducts both sustainability research and other research may be included."

Specifically, Sustainable Campus staff aimed to identify any FSU employee who conducted sustainability research during the 2019-2022 academic years, particularly those who had released a sustainability-related publication or contributed to a sustainability-related project. For the purposes of reporting, "sustainability research" was defined as:

Research and scholarship that explicitly addresses the concept of sustainability, furthers our understanding of the interdependence of ecological and social/economic systems, or has a primary and explicit focus on a major sustainability challenge¹ (AASHE, 2019, p. 4).

The research inventory was compiled using information from informational interviews, University communications channels, the Faculty Expertise and Advancement System (FEAS) application, the Pivot database, and Collaborative Collision events.

Sustainable Campus staff held informational interviews with 84 faculty members whose research or teaching relates to sustainability. Specifically, interviewees were asked:

¹ According to AASHE, "sustainability challenges" include (but are not limited to) climate change, global poverty and inequality, natural resource depletion, and environmental degradation (AASHE, 2019, p. 4).

- What projects, teaching, or research have you completed related to sustainability?
- How have you utilized experiential learning in the classroom?
- Have you collaborated with community partners in the past? If yes, describe your involvement.

Interviewees provided referrals, which helped to identify additional research related to sustainability.

Sustainable Campus staff also monitored FSU communication channels and social media for news and updates related to sustainability research. Researchers and faculty members who were mentioned in articles or social media posts were added to the inventory.

The Office of Faculty Development and Advancement maintains the Faculty Expertise and Advancement System (FEAS) application with information on faculty such as: teaching activities, scholarly or creative activities, grants received, and service. FEAS was used to gather research information on faculty that received a research grant or published a refereed journal article within the timeframe of July 1, 2019 - June 30, 2022. Maintaining the above parameters, the FEAS keyword search tool was utilized and reviewed to verify that the research was in fact sustainability research. See Appendix B for the full list of keywords.

Pivot is a database with over 27,000 funding opportunities that allows users to set up searches and alerts. Pivot provides information about researchers in virtually all fields – including non-sciences. The Pivot database was used to research information on faculty who received a research grant, published a refereed journal article, and/or included sustainability on their professional webpage within the timeframe of July 1, 2019 – June 30, 2022. The Pivot database keyword search tool was utilized and reviewed to verify that the research was sustainability research.

Collaborative Collision is an interdisciplinary networking program designed to connect researchers with complementary interests, turn those connections into collaborations, and accelerate their success through an internal funding competition. Attendance lists and presentation samples from the Collaborative Connector and Collaborative Accelerator events were utilized to identify faculty members and researchers who were interested in or had completed research on a sustainability-related topic.

Using these data sources, Sustainable Campus identified 335 individual researchers

who had conducted sustainability research since 2019. The research inventory contains the following information about individual researchers:

- Last Name
- First Name
- Email
- Title

- College
- Research Interests/Topics
- Sample Publication
- Website

• Department(s)/Program(s)

After the research inventory was published on the Sustainable Campus website, Sustainable Campus staff sent an email notification to all researchers included in the database to confirm that the researchers believed themselves to have completed sustainability-related work in the past three years and to ask if there were any errors in reporting. As a result of the email notification, a small number of researchers asked to be removed from the database, and others submitted minor changes to their entries.

Developing the FSU Sustainable Course Guide

To meet the requirements of AASHE STARS, Sustainable Campus staff developed the FSU Sustainable Course Guide.

STARS requires universities to provide an inventory that includes sustainability course offerings from the past three years (prior to report submission). The inventory must describe how each course addresses sustainability, specifically whether they are sustainability-focused or sustainability-inclusive.

Sustainable Campus staff audited courses rather than individual classes or class sections. Staff defined "sustainability courses" as courses that described the relationship between at least two of the three pillars of sustainability, which include the environment, economic systems, and equity, or are focused entirely on sustainability.

Sustainable Campus staff labeled a course "sustainability-focused" if the main focus of the class was sustainability and/or the course discussed two out of the three dimensions of sustainability. Sustainable Campus labeled a course "sustainability-inclusive" when the class was focused on another topic, but included a module, project, or unit that included at least two dimensions of sustainability.

For example, while economic systems are an aspect of sustainability, a typical economics class only covers one dimension of sustainability. However, an economics class that focuses on the intersection of economics and the environment covers two

dimensions and would be considered a 'sustainability course.' An economic class that includes a section on environmental economics would be considered a course that includes sustainability.

To identify courses from the 2018-2020 academic years, Sustainable Campus staff worked with the Office of the University Registrar and the Office of Institutional Research in November of 2020. Staff from both offices used a curated list of SDG keywords to filter relevant course listings and produce an Excel sheet with over 34,800 lines of data representing potential courses.

The SDG keyword list (Appendix B) included 345 terms, specifically 33 economic sustainability terms, 154 environmental sustainability terms, and 158 social sustainability terms. These terms were compiled from SDG keyword lists created by Florida State University, Michigan State University, Ohio State University, the Sustainable Development Solutions Network, the University of Florida, and the University of Toronto.

After receiving the list of potential courses from the University Registrar and Institutional Research, Sustainable Campus staff used the following process for auditing individual classes:

1. Examine the course title and description for the presence of key words

- Individually-directed courses and special topics courses were not included
- 2. Examine the key words in context
 - For example, does "environment" refer to the natural world or a specific context related to the discipline?
- 3. Examine the relatedness of key words to broader concepts of environment, society, and economy
 - Are there keywords that represent more than one pillar of sustainability?

4. Examine the interconnectedness of concepts

• Are the keywords linked with language that "describes the relationship between at least two of the three pillars of sustainability?"

5. Conduct a final review

- Even if there are no keywords present, is there evidence to support the idea that sustainability is a theme in the course?
- Is the course sustainability-focused or sustainability-inclusive?

Sustainable Campus assigned one staff member to the initial review of all 34,800+ data points. After the initial review, another staff member provided their feedback on the

courses that were identified as sustainability courses.

Once the first draft of the course guide was created, Sustainable Campus staff shared the listing with academic departments that had been included in the database to ask if there were any errors in reporting or if there were other courses that should be added to the inventory. As a result, eight departments responded with minor changes to their departmental listings.

After validation from individual academic units and departments, Sustainable Campus published the Sustainable Course Guide, which includes 418 individual courses. The course inventory contains the following information about each course:

- College
- Department
- Subject
- Number

- Course Description
- Type (Focused/Inclusive)
- Liberal Studies: Course Area
- Liberal Studies: Designation

Course Title

Mapping Researchers and Courses to the SDGs

The university review team involved one full time Sustainable Campus staff member and two graduate student Sustainability Fellows who mapped sustainability researchers and courses to the 17 UN SDGs. Before beginning the coding process, the team worked to ensure that there was a consistent definition and criteria in place for each SDG. The team members divided up the 17 SDGs and formulated their own definitions based on the targets designated for each SDG by the UN. The definitions focused on how the goals could be addressed in an academic setting and included frequently used keywords that could be found in course and research descriptions, alluding to their association with each specific SDG.

The team members reviewed these definitions and then conducted a brief coding test. Each team member was asked to identify which SDGs were relevant to an identical set of five research projects and five courses on separate spreadsheets. Afterwards, the team reviewed their results and discussed any discrepancies to ensure that there was a clear and concise understanding of the SDGs across the team. Along with the definition list being available for reference at any point during the coding process, justifications for the coding of each researcher and course were recorded in a separate document. The coder, SDGs identified, and key words in either the SDG definition or course/research description were noted to signify the reasoning behind each decision made.

Once the coding process began, the researchers were divided into three sections of 111 researchers per team member. The team had a quota of 28 researchers per team member per week in order to complete coding the research database in four weeks. Next, the team began to code the course database, again splitting the list into three groups of 139 courses per team member. Each team member coded 35 courses per week, and after three weeks, the course database was fully coded.

The team members recorded their findings in a spreadsheet. In the spreadsheet, the courses/researchers formed the rows, and the SDGs formed the columns. For each researcher and course, the team member input a "1" into the appropriate SDG column if the researcher/course was applicable to an individual goal. If the researcher/course was not applicable to a particular SDG, the column was left blank. This allowed for a simple formula to be applied at the end of the process to calculate the sum of each SDG column to find the total number of researchers and courses relevant to each SDG. Once the total for each SDG was determined, another formula was applied to analyze how many SDGs were found to be relevant to researchers and courses by each FSU college.

Automating the Research and Course Mapping Process

The university review team found that the process of categorizing courses and research based on their SDG alignment was time-consuming and inefficient. The university review process, specifically the coding of sustainability researchers and courses, was divided between a group of three and completed over three months. Repeating this effort annually or expanding this effort to all Florida State courses and researchers would require a very large amount of staff time as well as resources.

Taking this into consideration, Sustainability Fellow Juan Argüelles attempted to develop a solution in tandem and outside of the scope of the initial project that would automate the process and produce comparable results. The initial solution was in the form of a Microsoft Excel function. Argüelles developed an IF AND SEARCH function to scan course and research descriptions and compare the text to a data set of keywords compiled by the Sustainable Development Solutions Network (SDSN). The keyword set was compared to the previously generated keywords and phrases, and those that were not included in the SDSN set were added.

To validate the function, Argüelles carried out a test against the coding performed by the team members during the beginning stages of the project. The function reproduced

the results from the team with a 60.5% accuracy rate. Argüelles audited and refined the keywords, and the final Excel function reproduced the results of the initial test with an accuracy of 64.8%. The discrepancies observed may be the result of innuendo that is not captured by an Excel function. Through the development of the Excel function, the team proved that there is room for an automated solution to reduce the coding burden and streamline the process.

Appendix B: FSU SDG Keyword List

- Abate
- Abuse
- Accessib*
- Accountable
- Acidification
- Activist
- Adapt*
- advocacy
- Affordable
- Agricultur*
- Air Quality
- Allocation
- Antarctic*
- Anthropo*
- Applied Science
- Appropriate
 Technology
- Architecture
- Arctic
- Assessment
- Assistance
- Awareness
- Basic services
- Best Management Practices
- Bio*
- Brundtland
- Commission
- Buildings
- Built Environment
- CAFE standards
- Capitalism
- Carbon
- Carrying Capacity
- Circular Economy
- Cities
- Citizenship
- City
- Civil society
- Class
- Clean

- Climat*
- Climate
- Coast*
- Collaboration
- Collective
- Community *
- Compost
- Connect
- Conserv*
- Construction
- Consum*
- Contamina*
- Corporate Social Responsibility
- Cost Benefit
 Analysis
- Cradle to Cradle
- Cradle to Grave
- Crop*
- Culture
- Decision-making
- Deforestation
- Degradation
- Desert
- Design
- Develop*
- Digital divide
- Disadvantaged
- Disaster*
- Discriminat*
- Disease*
- Disparit*
- Divers*
- Drought
- Dynamic
- Earth*
- Eco*
- Economic*
- Ecosystem *
- Educat*
- Education

- Efficienc*
- Electricity
- Emission*
- Employ*
- Empower*
- Energy *
- Environment
- Environmental *
- Equalit*
- Equit*
- Ethic*
- Eutrophication
- Family Planning
- Farm*
- Financial *
- Fish*
- Flood
- Food *
- Footprint

Fuel

•

.

•

.

•

•

•

•

•

•

•

•

Fossil fuels

Gardens

Gender

Genetic*

Geo*

Glacier

Global *

Governance

Greenhouse gas*

Grassroot

Green *

Habitat

Health*

Histor*

Human *

Humanitarian

104

Heat

HIV

Hands-on

Girl

• Forest

FSU University Review of Research and Teaching on the UN SDGs

- Hunger •
- Hungry
- HVAC •
- Hydraulic •
- Hydro* •
- Ice loss •
- Inclusive •
- Income * •
- Indigenous •
- Industr* ٠
- Inequalit* •
- Infected •
- Infrastructure •
- Innovat* •
- Insecurity •
- Institution* •
- Integrat* •
- Intercultural •
- Interdisciplinary ۲
- International * •
- Intervention •
- Invasive •
- Issues •
- Judiciary •
- Justice •
- Labor •
- Land use •
- Landscape •
- Leadership •
- LEED •
- Life Cycle •
- Life expectancy ٠
- Limits to Growth
- Literacy skills •
- Livable •
- Local ۲
- Long-term •
- Low impact •
- Low-income •
- Malaria •
- Malnourished
- Malnutrition

- Management
- Manufactur* •
- Margin* •
- Marine * •
- Maternal mortality •
- Measles •
- Medical •
- Mental health •
- Micro finance
- Microfinance •
- Micro-organisms •
- Migrant •
- Migration •
- Millennium • **Development** Goals
- Minorit* •
- Mitigation •
- Modern * •
- Mortality •
- National * •
- Natural •
- Network •
- New Urbanism •
- Non-profit
- Non-violence
- Nuclear •
- Numeracy •
- Nutritio* •
- Ocean * •
- Oceanography •
- Oil •
- Optimiz*
- Organic •
- Our Common • Future
- Over crowding •
- Overconsumption •
- Overextraction •
- Overfishing •
- **Ozone Depletion** •
- **Paris Agreement** •

- Parks •
- Participation
- Peace •
- Permaculture •
- Photovoltaic •
- Planning •
- Plant * •
- Poach* •
- Polar
- Police •
- Policy * •
- Politics .
- Pollut* •
- Poor •
- Population * •
- Poverty * •
- Power •

•

.

•

•

•

•

•

•

•

•

•

.

•

•

•

.

•

•

•

•

•

•

.

•

Preservation • Produce

Production

Productiv*

Progress*

Protect*

Public *

Quality *

Racisim

Recycl*

Reduc*

Reform

Recreation

Reforestation

Refrigerant

Refugee *

Regulation

Remediation

Renewable *

105

Remittance

Reliab*

Religion

Queer

Race

Production chains

FSU University Review of Research and Teaching on the UN SDGs

- Reproduct* •
- Research
- Resident* •
- Resilien* •
- Resistance •
- Resource •
- Restor* •
- Retail •
- Reuse •
- Rights ٠
- Risk •
- River •
- Road* •
- Rule of law •
- Rural •
- Safe* •
- Safety •
- Sanitation * •
- **Scholarships** ۲
- School •
- Sea * •
- Secur* •
- Sequestration ۲
- Settlement ٠
- Sewage •
- Sex* •
- Shanty ۲
- Slavery •
- Slum •
- Smart * •
- Social * •
- Societal
- Society •
- Socio*
- Soil *
- Solar * .

- Spatial
- **Species**
- Stakeholder •
- Steward •
- Suburban •
- Support* •
- Sustain •
- Sustainab* •
- Sustainability •
- Sustainable * •
- Systems •
- Taxation •
- Technolog* •
- Temperature •
- Terrestrial •
- Theft •
- Thermal
- Third World •
- Threatened • species
- Torture •
- Toxicity •
- Trade * •
- Traffick* •
- Transborder •
- Transboundary •
- Transform* •
- Transit •
- Transparency •
- Transport* •
- Tree * •
- Uncertainty •
- Under* •
- Unemployment
- Universal •
- Unregulated •

- Unstable societies
- Untreated •
- wastewater Urban *
- •
- Urbanisation •
- Vaccines •
- Value chains •
- Vehicles •
- Viable •
- Violence •
- Vocational •
- Vulnerable •
- Wage •
- Warming •
- Waste * •
- Wasting
- Water * •
- Water-borne •
- Watershed •
- Water-use
- Wave •
- Wealth distribution •
- Weather •
- Welfare •
- Well being •
- Well-being •

Women *

Women's

Work*

Youth

World *

106

- Wetland* •
- Wildlife • Wind *

•

•

| SDG | Definition | Key Words |
|------------------------|--|--|
| SDG 1 - No Poverty | The goal of SDG 1 is to end poverty in all its forms everywhere. Researchers and instructors address this SDG by assessing poverty rates, social services that individuals depend on, and/or policy or initiatives that prevent poverty. | Extreme poverty Social protection systems and measures Equal rights for economic resources Resilience of the poor and those in vulnerable situations Mobilization of resources for developing countries |
| SDG 2 - Zero Hunger | The goal of SDG 2 is to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture. Researchers and instructors address this SDG by assessing the accessibility of safe and nutritious food, malnutrition, productivity and income of small-scale food producers, sustainable food production and the maintenance of genetic diversity in food production. | Malnutrition Agricultural productivity/resiliency Sustainable food production systems Genetic diversity of seeds, cultivated plants and animals Investment in rural infrastructure Food commodity markets |

Appendix C: FSU University Review SDG Definitions

| SDG | Definition | Key Words |
|--|--|--|
| SDG 3 - Good Health and Well Being | The goal of SDG 3 is to ensure healthy lives and promote well-being for all at all ages. Researchers and instructors address this SDG by asssessing or expanding upon the global maternal mortality rate, epidemics of communicable diseases, preventable deaths of newborns, premature mortality from non- communicable diseases, substance abuse prevention and treatment, road traffic accidents, universal access to sexual and reproductive healthcare services, universal health coverage, deaths and illness from hazardous chemicals and environmental pollution. | Maternal and infant mortality AIDs, tuberculosis, malaria, hepatitis, water-borne diseases Substance abuse Sexual and reproductive health- care Universal health coverage Hazardous chemicals and air, water and soil pollution Vaccines Recruitment and retention of health workforce Mental health |
| SDG 4 - Quality Education | The goal of SDG 4 is to ensure inclusive and equitable quality education and promote lifelong learning opportunities. "Quality" includes basic school infrastructures (water, electricity, safety) that are free or affordable for all genders, abilities, and ages around the world. This includes technical, vocational, and tertiary schooling. Quality education should equip students with literacy and numeracy, prepare them for decent jobs, and promote the sustainable development goals. The supply of adequately trained teachers is also relevant. | Equitable and quality education Early childhood development Gender disparities in education Literacy and numeracy Effective learning environments Qualified teachers |

| SDG | Definition | Key Words |
|--|--|---|
| SDG 5 - Gender Equality | The goal of SDG 5 is to achieve gender equality and empower all women and girls. Researchers and instructors address this SDG by focusing on the rights of women of all ages, including fair wages, sex trafficking, forced marriage, violence, and healthcare. They also address equal opportunity for financial and social well-being. | Violence against women and girls Early and forced marriage Female genital mutilation Unpaid care and domestic work Women's full and effective participation in political, economic, public life Sexual and reproductive health and reproductive rights |
| SDG 6 - Clean Water and Sanitation | The goal of SDG 6 is to ensure availability and sustainable management of water and sanitation for all. Researchers and instructors address this SDG by studying universal and equitable access to safe water for drinking and sanitation, the reduction of harmful pollution and open defecation, and increased water use/reuse efficiency. They also address water resource management and the protection of water-related ecosystems. | Safe and affordable drinking water Equitable sanitation and hygiene Water pollution Water-use efficiency |

| SDG | Definition | Key Words |
|--|---|--|
| SDG 7 - Affordable and Clean Energy | The goal of SDG 7 is to ensure access to affordable, reliable, sustainable, and modern energy for all. Affordable, clean and modern energy includes renewable energy sources such as solar energy, wind power, geothermal energy, hydropower, tidal power, biomass, and nuclear power. Energy consumption includes the electricity sector, heat sector, and transport sector. Researchers and instructors address this SDG by studying access to energy, energy efficiency, and renewable energy sources. | Affordable, reliable, and modern energy services Renewable energy Solar, photovoltaics Energy efficiency Clean energy |
| SDG 8 - Decent Work and Economic Growth | The goal of SDG 8 is to promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all. Decent work is productive and delivers a fair income, security, opportunities for personal development, and freedom for people to express their concerns. Researchers and instructors address this SDG by defining "sustainable" economic growth, exploring ways to increase economic productivity, and promoting labor rights. | Economic productivity, Economics Entrepreneurship Labor rights (forced labor, modern slavery, and human trafficking) Safe and secure working environments Sustainable tourism Banking and financial services Taxes |

| SDG | Definition | Key Words |
|--|--|--|
| SDG 9 - Industry, Innovation and Infrastructure | The goal of SDG 9 is to build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation. Economic growth, social development, and climate action are all dependent on investments in infrastructure, sustainable industrial development, and technological progress. Researchers and instructors address this SDG by developing resilient infrastructures, promoting industrialization in the least developed countries, and researching industrial technologies. | Sustainable and resilient infrastructure Grid, system Affordable credit Clean and environmentally sound technologies and industrial processes Technology development in developing countries Access to information and communication technology Geographic Information Systems (GIS) |
| SDG 10 - Reduced Inequalities | The goal of SDG 10 is to reduce inequality within and among countries. Inequality exists in many forms, including economic, sex, disabiltiy, and race. Issues associated with health, pollution, and environmental justices are often inseparable with inequality. Researchers and instructors address this SDG by promoting equal opportunities for all, exploring ways to reduce income inequalities and discrimination, and improving global financial markets and institutions. | Social, economic, and political inclusion Elimination of discriminatory laws, policies, and practices Social protection policies Enhanced representation and voice for developing countries Responsible migration and mobility of people Persons with disabilities |

| SDG | Definition | Key Words |
|--|--|---|
| SDG 11 - Sustainable Cities and Communities | The goal of SDG 11 is to make cities and human settlements inclusive, safe, resilient, and sustainable. Researchers and instructors address this SDG by studying equal access and efforts to develop safe, sustainable, and affordable housing, public spaces, and transportation. They also address the impact of urban life on the environment and the relationships between adjacent urban and rural areas, as well as urban and rural countries around the world. Finally, researchers and instructors address cities and developments aiming to protect air quality, cultural heritage, disaster resilience, and resource efficiency. | Safe and affordable housing Safe, affordable, accessible transport systems Sustainable urbanization Cultural and natural heritage Environmental impact of cities Accessible, green and public spaces National and regional development planning Community-engaged Neighborhoods |
| SDG 12 - Responsible Consumption and Production | The goal of SDG 12 is to ensure sustainable consumption and production patterns. Researchers and instructors address this SDG by examining the sustainable management and efficient use of natural resources. This includes food reduction, the sound management of chemicals and all wastes throughout their life cycles. It also means ensuring that everyone has the relevant information and awareness for sustainable development and sustainable lifestyles. | Sustainable management of natural resources Prevention, reduction, recycling and reuse Waste (food, chemicals) Chemical pollution Radiation Sustainability reporting Sustainable procurement practices Market distortions Oil spills |

| SDG | Definition | Key Words |
|------------------------------|---|---|
| SDG 13 - Climate Action | The goal of SDG 13 is to take urgent action to combat climate change and its impacts. Researchers and instructors address this SDG by examining the resilience, prevention, funding, and adaptation policies related to climate hazards and disasters. They also address planning and management to mitigate and prevent these effects while prioritizing least developed countries, minority communities, and the youth. | Climate-related hazards and natural disasters Climate change Impact reduction, and early warning Atmosphere Tropical cyclones |
| SDG 14 - Life Below Water | The goal of SDG 14 is to conserve and sustainably use the oceans, seas and marine resources for sustainable development. Researchers and instructors address this SDG by exploring ways to prevent and significantly reduce marine pollution of all kinds. They do this by examining the sustainable management and protection of marine and coastal ecosystems, scientific cooperation to minimize and address the impacts of ocean acidification, analyze the conservation of coastal and marine areas, and study ways to increase the economic benefit from the use of sustainable marine resources to developing countries. | Marine and coastal ecosystems Marine pollution (marine debris and nutrient pollution) Ocean acidification Fisheries (overfishing, unregulated fishing) Small island developing states |

| SDG | Definition | Key Words |
|--|--|--|
| SDG 15 - Life on Land | The goal of SDG 15 is to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. Researchers and instructors address this SDG by studying the protection and revitalization of natural ecosystems such as forests and mountains. Threats can include desertification, deforestation, drought, loss of biodiversity, poaching, invasive/endangered species, and degradation. They also address the proper funding and management of environmental protection initiatives and equal access to these and other relevant resources. | Terrestrial and inland freshwater ecosystems (forests, wetlands, mountains, drylands) Deforestation Desertification (degraded land and soil) Biodiversity Poaching and trafficking of protected species Invasive/endangered species |
| SDG 16 - Peace, Justice and Strong Institutions | The goal of SDG 16 is to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels. Researchers and instructors address this SDG by studying ways to reduce violence and related deaths everywhere. They do this by developing initiatives to end abuse and the exploitation of children, promoting the rule of law and ensuring equal access to justice, reducing illicit financial and arms flow, along with the recovery of stolen assets and combat all forms of organized crime, developing effective, accountable and transparent institutions and decision-making strategies that ensure responsive, inclusive, participatory and representative. | Abuse, exploitation, trafficking and violence Terrorism and crime Corruption and bribery Accountable and transparent institutions Representative decision-making Non-discriminatory laws |

| SDG | Definition | Key Words |
|---|--|--|
| SDG 17 - Partnerships for the Goals | The goal of SDG 17 is to strengthen the means of implementation and revitalize the global partnership for sustainable development. Researchers and instructors address this SDG by studying, ways in which developed countries can aid developing countries improve domestic capacity for revenue collection; development assistance commitments; mobilize additional financial resources for developing countries from multiple sources; attainment of long-term debt sustainability, relief, and restructure, assessment of external debt of highly indebted poor countries to reduce debt distress, as well as the adoption and implementation of investment promotion regimes; the relationship between North and South Korea; building upon existing initiatives to develop measurements of progres on sustainable development. | Finance - resources for developing countries Technology - environmentally sound technologies Capacity building - capacity building in developing countries Stakeholder science Trade - multilateral trading system Systemic issues Policy and institutional coherence Multi-stakeholder partnerships Nonprofits and NGOs Data, monitoring, and accountability |

Appendix D: Potential Funding Related to the UN SDGs

Introduction

Funding allows academic and non-academic staff to work on the economic, social, and environmental issues that are critical to our global society. The following section details potential funding sources for instructors and researchers who seek additional resources to incorporate the UN SDGs into their teaching and research. This list is not a comprehensive guide to *all* available funding sources related to the SDGs. It is intended to be used as a starting point for interested staff who can utilize the following sources to begin their search for external funding.

The funding sources for the Sustainable Development Goals were identified using the SDGs definitions, specifically, the "Key Words or Phrases," to find aligned grant opportunities. The funding databases provided advanced search filters to narrow down the funding sources that best fit each goal. The research included using databases such as Grants.gov and PIVOT (FSU Database). Information such as the funder, the grant amount, and the application period or deadline determined whether a grant was included in the funding database. The mapping process also included selecting criteria for "higher education institutions" to ensure eligibility.

SDG 1: No Poverty

- The Office of Planning, Research, and Evaluation (OPRE) within the Administration for Children and Families (ACF) provides funding for Behavioral Interventions Scholars grants that support dissertation research by advanced graduate students who are applying a behavioral economics or behavioral science lens to issues facing low-income and other vulnerable families in the United States. Learn more.
- The Institute for Research on Poverty (IRP) in collaboration with the Center for Financial Security (CFS) at the University of Wisconsin–Madison has funding to support the study of economically vulnerable populations related to poverty, retirement, and disability policy. Learn more.

SDG 2: Zero Hunger

• The Foundation for Food & Agriculture Research (FFAR) aims to accelerate the development of an innovative methodology (technological and/or non technological for regularly occurring quantitative measurement of food waste

generated in US households that can be used by stakeholders across the food system. Learn more.

- Northeast Sustainable Agriculture Research & Education Professional Development Grants fund train-the-trainer projects that develop the knowledge, awareness, skills and attitudes among the full range of service providers who work with farmers, including agricultural professionals who teach, advise and assist farmers about sustainable agriculture practices and strategies as well as non-agricultural service providers (e.g., attorneys, lenders, etc.) that work with farmers. Learn more.
- Safeway and Albertsons Companies Foundations fund organizations that strengthen the neighborhoods and organizations that strengthen the neighborhoods it serves. The foundations support nonprofit organizations whose mission is aligned with its priority areas: 1) Health and Human Services; 2) Hunger; 3) Youth and Education; 4) Veterans; 5) Supporting Diversity and Inclusion of All Abilities. Learn more. Learn more.
- The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is seeking applications proposing research to develop, apply, and test innovative and creative community-engaged approaches to reduce household food waste in the United States. Learn more.

SDG 3: Good Health and Well-Being

- The 1907 Trailblazer Award was established to encourage high-impact, stepchange approaches to research in the brain and mind sciences for mental health. The applicant pool includes researchers on the causes of mental illness as well as cures. <u>Learn more</u>.
- The Bruce and Jane Walsh Grant supports scientific, scholarly, or applied research and/or educational activities investigating how personality, culture, and environment influence work behavior and health (mental and physical). Learn more.
- The Burroughs Wellcome Fund aims to stimulate the growth of new connections between scholars working in largely disconnected fields who might together change the course of climate change's impact on human health. Learn more.
- **The Marian R. Stuart Grant** furthers the research, practice, or education of an early career psychologist on the connection between mental and physical health, particularly for work that contributes to public health. <u>Learn more</u>.

• The Minority Research Grant Program supports research on the discovery and characterization of health processes, practices, behaviors, and burdens or issues related to CMS programs, policies, and operations, that influence health equity. Learn more.

SDG 4: Quality Education

- American Educational Research Association (AERA) Dissertation Grants support highly competitive dissertation research using rigorous quantitative methods to examine large-scale, education-related data. Learn more.
- The Department of Education's EIR program, established under section 4611 of the Elementary and Secondary Education Act, provides funding to create, develop, implement, replicate, or take to scale entrepreneurial, evidence-based, field-initiated innovations to improve student achievement and attainment for high-need students and to rigorously evaluate such innovations. Learn more.
- The Department of Energy's Office of Science Graduate Student Research Program (SCGSR) aims to prepare graduate students for science, technology, engineering, or mathematics (STEM) careers critically important to the DOE Office of Science mission by providing graduate thesis research opportunities at DOE laboratories. Learn more.

SDG 5: Gender Equality

• The Alliance for Innovation on Maternal Health (AIM) program aims to improve the quality and safety of maternity care in birthing facilities by funding states and jurisdictions to implement patient safety bundles, which are a set of evidence-based practices, that when implemented collectively and reliably in the delivery setting, have improved patient outcomes and reduced maternal mortality and severe maternal morbidity. Learn more.

SDG 6: Clean Water and Sanitation

- **The EPA Environmental Justice Grant** funds up to \$10.5 million for projects focusing on air quality and drinking water quality. <u>Learn more</u>.
- The Florida EPA Nonpoint Source Management Grant provides funding for the control of water pollution from nonpoint sources. Learn more.

SDG 7: Affordable and Clean Energy

- The Florida Department of Agriculture and Consumer Services Office of Energy (FDACS OOE) provided funding for a Study of Energy Equity within Florida. Learn more.
- The U.S. Environmental Protection Agency (EPA) sought applications proposing community-engaged research that will address the drivers and environmental impacts of energy transitions in underserved communities. <u>Learn</u> <u>more</u>.

SDG 8: Decent Work and Economic Growth

• SARE Research for Novel Approaches Grants fund "proof of concept" projects intended to confirm the benefit and/or feasibility of new practices and approaches that have high potential for adoption by farmers. These practices and approaches may be related to production, marketing, business management, human resource management and other social issues, or other topics related to sustainable agriculture. Learn more.

SDG 9: Industry, Innovation and Infrastructure

• VentureWell Course & Program Grants of up to \$30,000 are awarded to faculty or staff at US higher education institutions to support curriculum that engages students in science and technology innovation and entrepreneurship. Learn more.

SDG 10: Reduced Inequalities

 The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, sought applications proposing transdisciplinary research to analyze environmental problems at the intersection of climate change, environmental justice (EJ), and vulnerable populations and life stages. <u>Learn more</u>.

SDG 11: Sustainable Cities and Communities

• **The Sustainable Communities Web Challenge** is a virtual coding event around the EPA's new input-output modeling app. <u>Learn more</u>.

SDG 12: Responsible Consumption and Production

- The Coca-Cola Sustainability Case Competition was an opportunity for college students to examine Coca-Cola's recycling goals and present solutions for practical implementation to create a more sustainable and bettered shared future. Learn more.
- The Environmental Protection Agency provided a funding opportunity to identify, characterize and manage risks of known and emerging chemical pollutants found in biosolids. <u>Learn more</u>.

SDG 13: Climate Action

- The Climate Solutions Acceleration Fund is dedicated to supporting innovative cross-sector climate action activities driven by colleges and universities. Learn more.
- The Climate and Equity Fund works in 13 states, including Florida, to support community based civic engagement, grassroots organizing, powerbuilding, and voter turnout programs for climate and clean solutions in the country. <u>Learn</u> <u>more</u>.

SDG 14: Life Below Water

• The National Science Foundation's Coastlines and People program supports diverse, innovative, multi-institution awards that are focused on critically important coastlines and people research that is integrated with broadening participation goals. Learn more.

SDG 15: Life on Land

- **The Paul M. Angell Family Foundation** makes grants in three priority areas: Conservation, Performing Arts and Social Causes. <u>Learn more</u>.
- The National Coastal Wetlands Conservations grants to protect, restore and enhance coastal wetland ecosystems and associated uplands. <u>Learn more</u>.

SDG 16: Peace, Justice and Strong Institutions

• Sociological Initiatives Foundation Grant Program funds research projects that investigate laws, policies, institutions, regulations, and normative practices that may limit equality in the United States and its territories. It gives priority to

projects that seek to address racism, xenophobia, classism, gender bias, exploitation, or the violation of human rights and freedoms. Learn more.

• National Institutes of Health are partners with the Department of Health and Human Services to provide funding that supports research in child maltreatment. Learn more.

SDG 17: Partnerships for the Goals

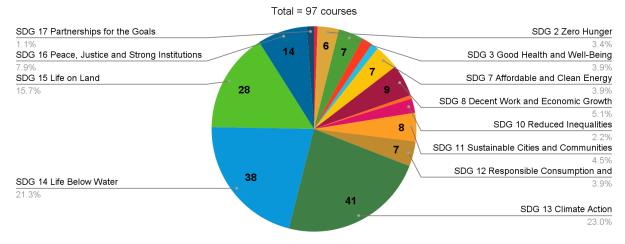
- The World Bank Group Partnership Fund for the Sustainable Development Goals works specifically on the achievement of SDG 17 by partnering with countries to participate in knowledge sharing, capacity building, and creating partnerships. Learn more.
- **Consultative Group to Assist the Poor (CGAP)** expands access to microfinance by the poor in developing countries through a consortium of 28 public and private development agencies. <u>Learn more</u>.

Appendix E: Alignment with the UN SDGs by College

College of Arts and Sciences

Figure 39: College of Arts and Sciences Sustainability Courses by SDG

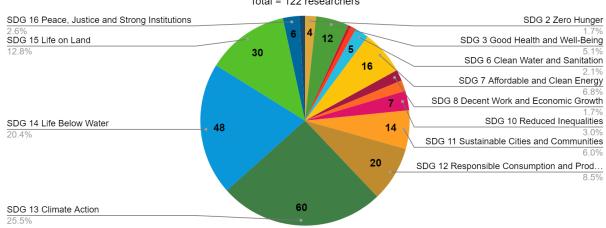
Sustainability courses in the College of Arts and Sciences addressed SDG 13: Climate Action most frequently.



College of Arts and Sciences Sustainability Courses by SDG

Figure 40: College of Arts and Sciences Sustainability Researchers by SDG

Sustainability researchers in the College of Arts and Sciences addressed SDG 13: Climate Action most frequently.



College of Arts and Sciences Sustainability Researchers by SDG

Total = 122 researchers

College of Business

Figure 41: College of Business Sustainability Courses by SDG

Sustainability courses in the College of Business addressed SDG 4: Quality Education, SDG 5: Gender Equality, SDG 8: Decent Work and Economic Growth, SDG 10: Reduced Inequalities, and SDG 16: Peace, Justice and Strong Institutions most often.

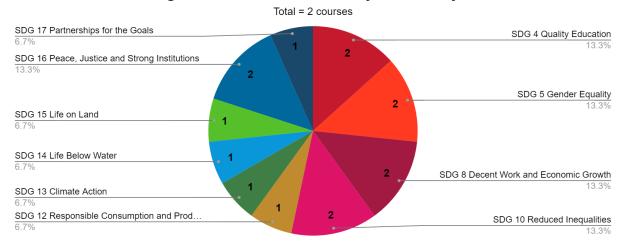
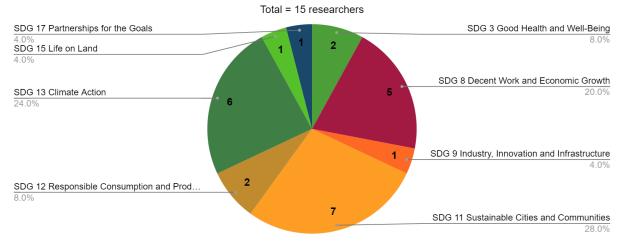




Figure 42: College of Business Sustainability Researchers by SDG

Sustainability researchers in the College of Business addressed SDG 11: Sustainable Cities and Communities most frequently followed by SDG 13: Climate Action and SDG 8: Decent Work and Economic Growth.



College of Business Sustainability Researchers by SDG

College of Communication and Information

Figure 43: CCI Sustainability Courses by SDG

Sustainability courses in CCI addressed SDG 4: Quality Education and SDG 9: Peace, Justice and Strong Institutions most frequently followed by SDG 12: Responsible Consumption and Production and SDG 13: Climate Action.

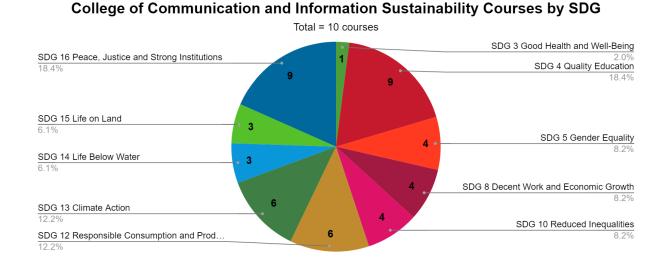
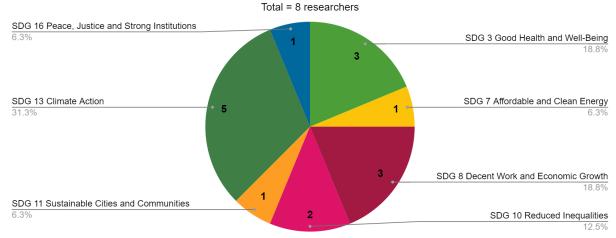


Figure 45: CCI Sustainability Researchers by SDG

Sustainability researchers in the CCI addressed SDG 13: Climate Action most frequently followed by SDG 3: Good Health and Well-Being and SDG 8: Decent Work and Economic Growth.



College of Communication and Information Sustainability Researchers by SDG

College of Criminology and Criminal Justice

Figure 46: College of Criminology and Criminal Justice Sustainability Courses by SDG

Sustainability courses in the College of Criminology and Criminal Justice addressed SDG 16: Peace, Justice and Strong Institutions most frequently followed by SDG 8: Decent Work and Economic Growth and SDG 10: Reduced Inequalities.

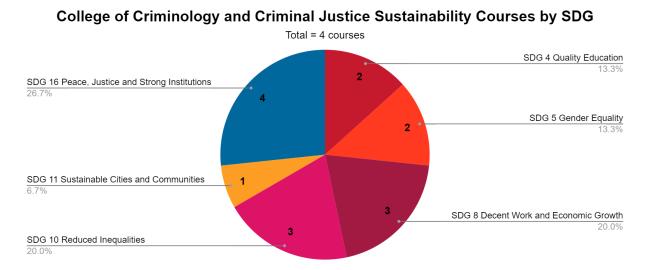
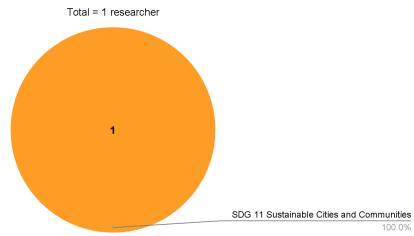


Figure 47: College of Criminology and Criminal Justice Sustainability Researchers by SDG

The sustainability researcher in the College of Criminology and Criminal Justice primarily addressed SDG 11: Sustainable Cities and Communities.

College of Criminology and Criminal Justice Sustainability Researchers by SDG



College of Education

Figure 48: College of Education Sustainability Courses by SDG

Sustainability courses in the College of Education addressed SDG 16: Peace, Justice and Strong Institutions most frequently followed by SDG 5: Gender Equality and SDG 11: Sustainable Cities and Communities.

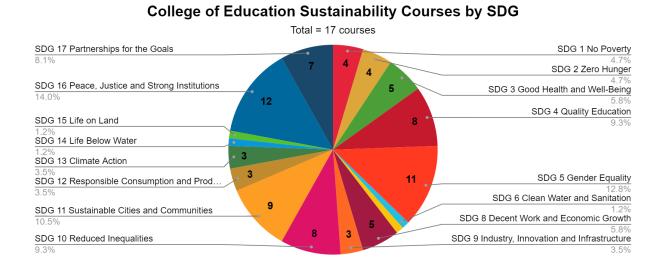
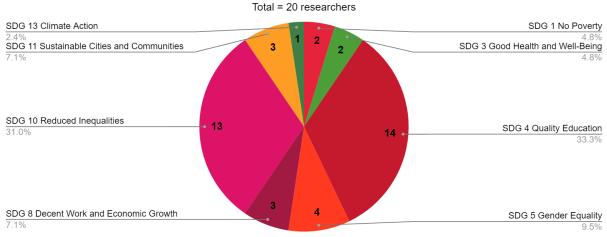


Figure 49: College of Education Sustainability Researchers by SDG

Sustainability researchers in the College of Education addressed SDG 4: Quality Education most frequently followed by SDG 10: Reduced Inequalities and SDG 5: Gender Equality.



College of Education Sustainability Researchers by SDG

FAMU-FSU College of Engineering

Figure 50: FAMU-FSU College of Engineering Sustainability Courses by SDG

Sustainability Courses in the College of Engineering addressed SDG 6: Clean Water and Sanitation and SDG 12: Responsible Consumption and Production most often followed by SDG 7: Affordable and Clean Energy.

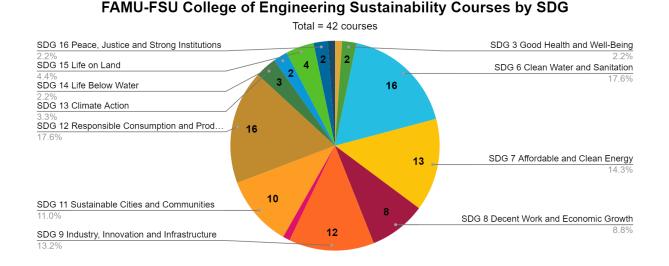
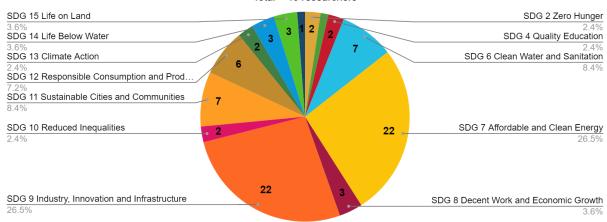


Figure 51: FAMU-FSU College of Engineering Sustainability Researchers by SDG

Sustainability researchers in the College of Engineering addressed SDG 7: Affordable and Clean Energy and SDG 9: Industry, Innovation and Infrastructure most frequently followed by SDG 6: Clean Water and Sanitation.



FAMU-FSU College of Engineering Sustainability Researchers by SDG

Total = 45 researchers

College of Fine Arts

Figure 52: College of Fine Arts Sustainability Courses by SDG

Sustainability courses in the College of Fine Arts addressed SDG 11: Sustainable Cities and Communities most frequently followed by SDG 12: Responsible Consumption and Production and SDG 16: Peace, Justice and Strong Institutions.

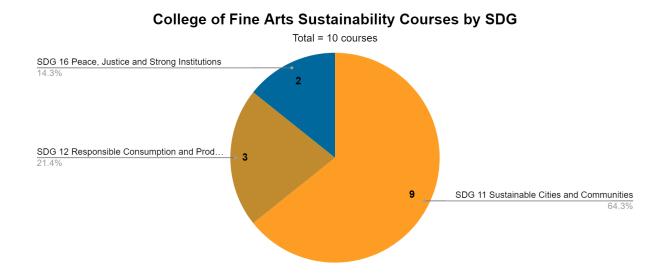
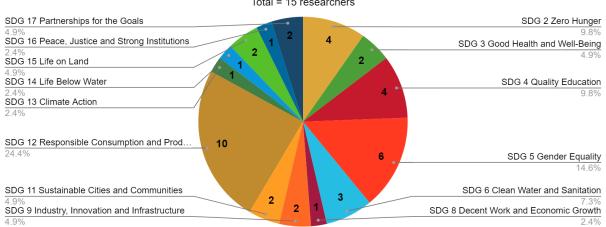


Figure 53: College of Fine Arts Sustainability Courses by SDG

Sustainability researchers in the College of Fine Arts addressed SDG 12: Responsible Consumption and Production most frequently followed by SDG 5: Gender Equality, SDG 2: Zero Hunger, and SDG 4: Quality Education.

College of Fine Arts Sustainability Researchers by SDG



Total = 15 researchers

College of Health and Human Sciences

Figure 54: College of Health and Human Sciences Sustainability Courses by SDG

The sustainability course in the College of Health and Human Sciences addressed SDG 2: Zero Hunger and SDG 16: Peace, Justice and Strong Institutions.

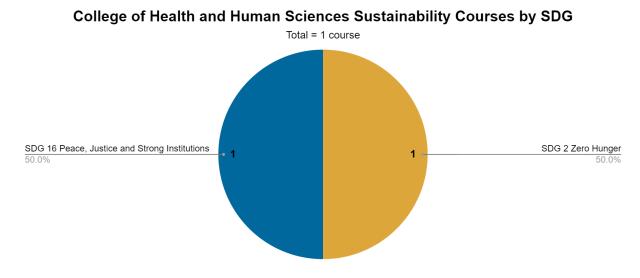
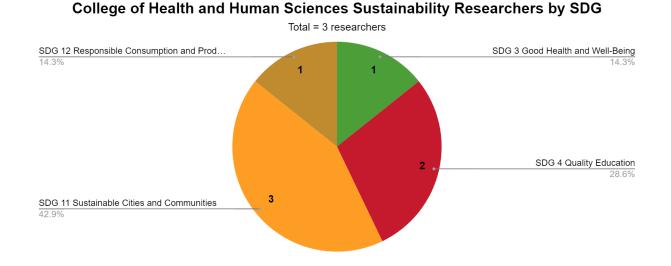


Figure 55: College of Health and Human Sciences Sustainability Researchers by SDG

Sustainability researchers in the College of Health and Human Sciences addressed SDG 11: Sustainable Cities and Communities most frequently followed by SDG 4: Quality Education, SDG 3: Good Health and Well-Being and SDG 12: Responsible Consumption and Production.



College of Law

Figure 56: College of Law Sustainability Courses by SDG

Sustainability courses in the College of Law addressed SDG 16: Peace, Justice and Strong Institutions most frequently followed by SDG 6: Clean Water and Sanitation and SDG 11: Sustainable Cities and Communities.

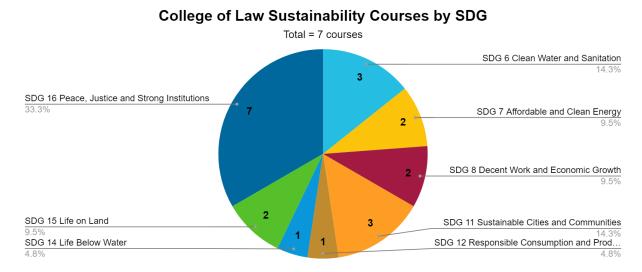
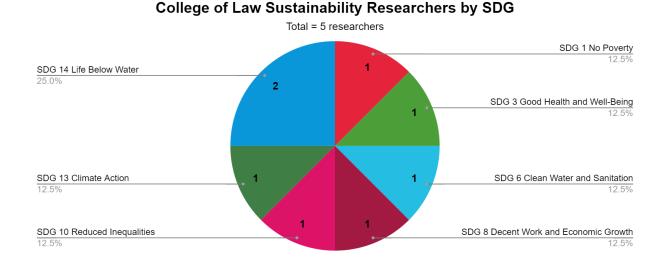


Figure 57: College of Law Sustainability Courses by SDG

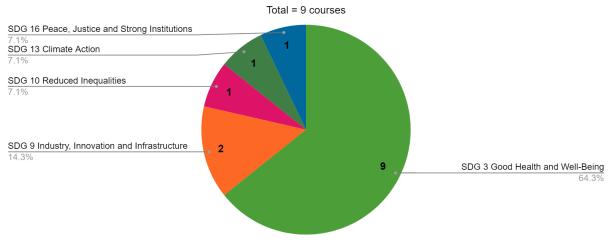
Sustainability researchers in the College of Law addressed SDG 14: Life Below Water most frequently followed by SDG 1: No Poverty, SDG 3: Good Health and Well-Being, SDG 6: Clean Water and Sanitation, SDG 8: Decent Work and Economic Growth, SDG 10: Reduced Inequalities, and SDG 13: Climate Action.



College of Medicine

Figure 58: College of Medicine Sustainability Courses by SDG

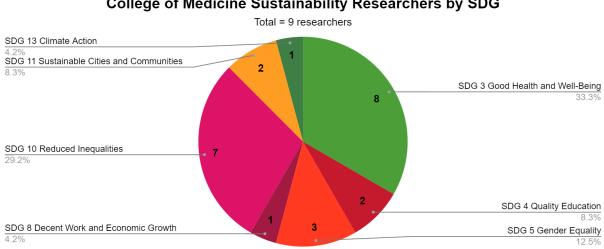
Sustainability courses in the College of Medicine addressed SDG 3: Good Health and Well-Being most frequently followed by SDG 9: Industry, Innovation and Infrastructure.



College of Medicine Sustainability Courses by SDG

Figure 59: College of Medicine Sustainability Researchers by SDG

Sustainability researchers in the College of Medicine addressed SDG 3: Good Health and Well-Being most frequently followed by SDG 10: Reduced Inequalities and SDG 5: Gender Equality.

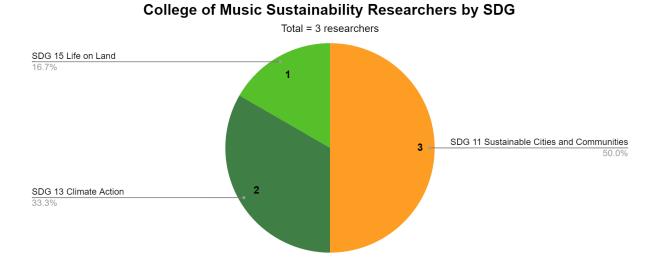


College of Medicine Sustainability Researchers by SDG

College of Music

Figure 60: College of Music Sustainability Researchers by SDG

Sustainability researchers in the College of Music addressed SDG 11: Sustainable Cities and Communities most frequently followed by SDG 13: Climate Action and SDG 15: Life on Land.

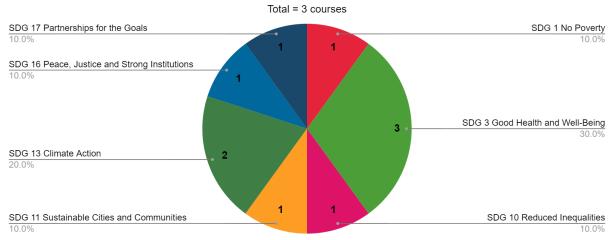




College of Nursing

Figure 61: College of Nursing Sustainability Courses by SDG

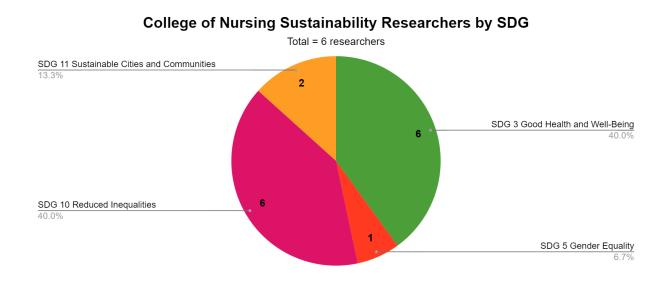
Sustainability courses in the College of Nursing addressed SDG 3: Good Health and Well-Being most frequently followed by SDG 13: Climate Action.



College of Nursing Sustainability Courses by SDG

Figure 62: College of Nursing Sustainability Researchers by SDG

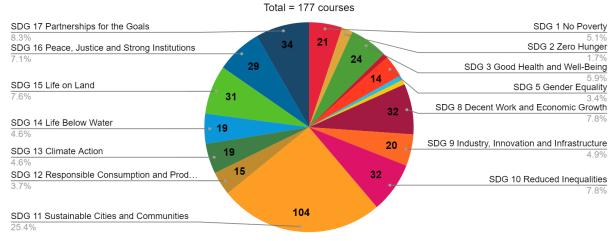
Sustainability researchers in the College of Nursing addressed SDG 3: Good Health and Well-Being and SDG 10: Reduced Inequalities most frequently followed by SDG 11: Sustainable Cities and Communities and SDG 5: Gender Equality.



College of Social Sciences and Public Policy

Figure 63: COSSPP Sustainability Courses by SDG

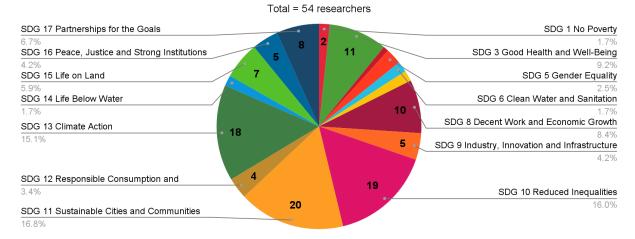
Sustainability courses in the College of Social Sciences and Public Policy addressed SDG 11: Sustainable Cities and Communities most frequently followed by SDG 17: Partnerships for the Goals, SDG 8: Decent Work and Economic Growth, and SDG 10: Reduced Inequalities.



College of Social Sciences and Public Policy Sustainability Courses by SDG

Figure 64: COSSPP Sustainability Researchers by SDG

Sustainability researchers in the College of Social Sciences and Public Policy addressed SDG 11: Sustainable Cities and Communities most frequently followed by SDG 10: Reduced Inequalities and SDG 13: Climate Action.



College of Social Sciences and Public Policy Sustainability Researchers by SDG

College of Social Work

Figure 65: College of Social Work Sustainability Courses by SDG

Sustainability courses in the College of Social Work addressed SDG 1: No Poverty and SDG 10: Reduced Inequalities most frequently followed by SDG 16: Peace, Justice and Strong Institutions and SDG 17: Partnerships for the Goals.

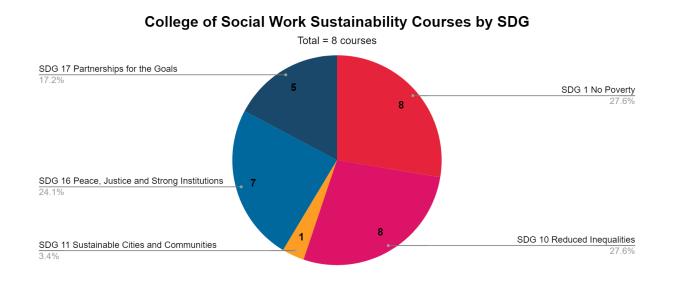
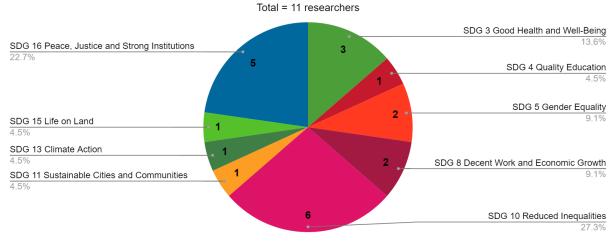


Figure 66: College of Social Work Sustainability Researchers by SDG

Sustainability researchers in the College of Social Work addressed SDG 10: Reduced Inequalities most frequently followed by SDG 16: Peace, Justice and Strong Institutions and SDG 3: Good Health and Well-Being.



College of Social Work Sustainability Researchers by SDG

Dedman College of Hospitality

Figure 67: Dedman College of Hospitality Sustainability Courses by SDG

Sustainability courses in the Dedman College of Hospitality addressed SDG 8: Decent Work and Economic Growth and SDG 16: Peace, Justice and Strong Institutions most frequently followed by SDG 1: No Poverty and SDG 12: Responsible Consumption and Production.

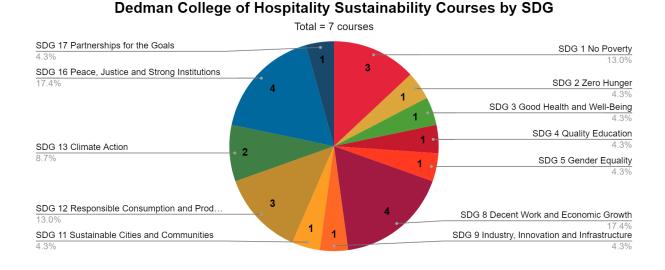
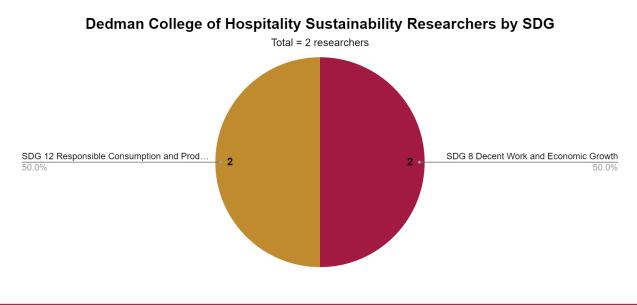


Figure 68: Dedman College of Hospitality Sustainability Researchers by SDG

The two sustainability researchers in the Dedman College of Hospitality both addressed SDG 8: Decent Work and Economic Growth and SDG 12: Responsible Consumption and Production.



Jim Moran College of Entrepreneurship

Figure 69: Jim Moran College of Entrepreneurship Sustainability Courses by SDG

Sustainability courses in the Jim Moran College of Entrepreneurship addressed SDG 8: Decent Work and Economic Growth most frequently followed by SDG 9: Industry, Innovation and Infrastructure and SDG 17: Partnerships for the Goals.

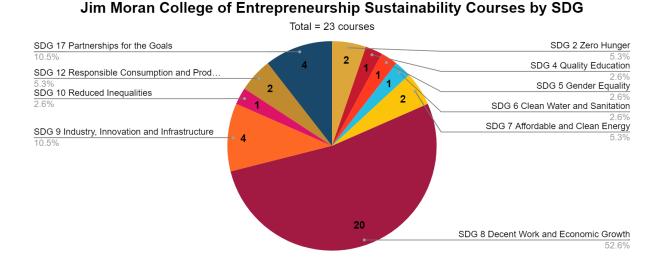
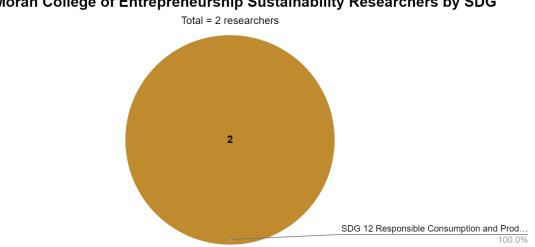


Figure 70: Jim Moran College of Entrepreneurship Sustainability Researchers by SDG

The two sustainability researchers in the Jim Moran College of Entrepreneurship both primarily addressed SDG 12: Responsible Consumption and Production.



Jim Moran College of Entrepreneurship Sustainability Researchers by SDG

Appendix F: FSU Sustainability Research Inventory Categorized by UN SDGs

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 1 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|----------------------|---|--|--|---|---|---|---|---|---|---|----|----|---|----|----|----|----|----|----|
| Abbott | Frederi ck M. | Law | Global Intellectual Property Governance and Sustainable Development | Abbott, Frederick M. and Abbott, Ryan Benjamin and Fortunak, Joseph and Gehl Sampath, Padmashree and Walwyn, David, Opportunities, Constraints and Critical Supports for Achieving Sustainable Local Pharmaceutical Manufacturing in Africa: With a Focus on the Role of Finance, Final Report (March 18, 2021). Nova Worldwide (2021), FSU College of Law, Law, Business & Economics Paper No. 21-03, Available at SSRN: https://ssrn.com/abstract=3811733 or http://dx.doi.org/10.2139/ssrn.3811733 | | | 1 | | | | | 1 | | | | | | | | |
| Abbott | Laurie | Nursing | Cardiovascular health equity among underserved, rural populations | Abbott, L. S., Slate, E. H., & Graven, L. J. (2020). Cardiovascular Disease Risk among Rural Residents Living with Diabetes and Pre- diabetes: A Cluster Randomized Trial. Public Health Nursing, 37(1), 16-24. doi:10.1111/phn.12659 | | | 1 | | | | | | 1 | | | | | | | |
| Abdel Razig | Yassir | Civil & Environment al Engineering | Construction Engineering & Management, Resilient Infrastructure- Sustainable & Green Buildings, Smart & Adaptive Engineering Systems, Simulation & Modeling of Engineering Systems | Somayeh Mafi, Yassir AbdelRazig, Gholamreza Amirinia, Ayberk Kocatepe, Mehmet Baran Ulak, Eren Erman Ozguven, Investigating exposure of the population to crash injury using a spatiotemporal analysis: A case study in Florida, Applied Geography, Volume 104, 2019, Pages 42-55, ISSN 0143- 6228, https://doi.org/10.1016/j.apgeog.2019.02.001. | | | | | | | | 1 | | | | | | | | |
| Abell | Neil (Josep h) | Social Work | Human rights methods, rights-based practices, mental health, stigma | McPherson, Jane & Abell, Neil & Contreras, Xander. (2019). Measuring Rights-Based Practice: Introducing the Human Rights Methods in Social Work Scales. British Journal of Social Work. 50. 10.1093/bjsw/bcz132. | | | | | | | | | 1 | | | | | | 1 | |
| Abich ou | Tarek | Civil & Environment al Engineering | Geoenvironmental engineering; geotechnical engineering (sustainable solid waste management); measuring, modeling, and mitigating fugitive emissions from landfills; | Non-Thermal Plasma Degradation of Per- and Polyfluoroalkyl Substances from Landfill Leachate (Feb 1, 2021 to Jan 31, 2022) | | | | | | | | 1 | | | 1 | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------------|---------------|---|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| | | | beneficial use of industrial by-products in CE applications; barrier systems, geosynthetics, design and innovation | | | | | | | | | | | | | | | | | | |
| Ahma dishar af | Ebrahi m | Civil & Environment al Engineering | Uncertainty/risk analysis; hydrologic and hydraulic modeling; watershed management; hydroclimatic extremes; urban stormwater; environmental sustainability; resilient water infrastructure; integrated natural resources management | Janizadeh, Saeid; Avand, Mohammadtaghi; Jaafari, Abolfazl; Phong, Tran V.; Bayat, Mahmoud; Ahmadisharaf, Ebrahim; Prakash, Indra; Pham, Binh T.; Lee, Saro. 2019. "Prediction Success of Machine Learning Methods for Flash Flood Susceptibility Mapping in the Tafresh Watershed, Iran " Sustainability 11, no. 19: 5426. https://doi.org/10.3390/su11195426 | | | | | | 1 | | | 1 | | | | | 1 | 1 | | |
| Alamd ari | Nasrin | Civil & Environment al Engineering | Urban hydrology and stormwater management; Hydrologic & hydraulic modeling; Sustainable and resilient urban water systems; Smart city technologies; Surface-groundwater interaction; Impact of nonstationary stressors—climate and land use change on hydrology and biogeochemistry | Yazdi MN, Sample DJ, Scott D, Owen JS, Ketabchy M, Alamdari N (2019 Water quality characterization of storm and irrigation runoff from a container nursery. Science of the Total Environment 667, 166-178. | | | | | | 1 | | | 1 | | | | | 1 | 1 | | |
| Alamo | Rufina | Chemical & Biomedical Engineering | Polymer characterization; polymer crystallization; sustainable polymers; physical properties of macromolecules; structure- properties relations of polymers; morphology of crystalline polymers | H. Janani, R.G. Alamo "Melt Miscibility of Blends of isotactic Polypropylene and Homogeneous iso-Propylene-1-Hexene Copolymers" J. Therm. Anal. Calorim. (under review) | | | | | | | | | 1 | | | | | | | | |
| Ali | M.M. | COAPS | Ocean-Atmosphere interaction with special reference to Wind Stress and Ocean Heat Content, estimating the wind stress from scatterometer and altimeter observations of sigma-0 instead of winds at 10m | Zheng, Y., Bourassa, M.A. & Ali, M.M. Statistical evidence on distinct impacts of short- and long-time fluctuations of Indian Ocean surface wind fields on Indian summer monsoon rainfall during 1991–2014. Clim Dyn 54, 3053–3076 (2020). https://doi.org/10.1007/s00382-020-05156-y | | | | | | | | | | | | | | 1 | | | |
| Andrei | Petru | Electrical & Computer Engineering | Modeling of metal-air and Li-ion batteries, supercapacitors, fuel cells, analysis of fluctuations, variability, and noise in electronic devices | Shen, C., Ye, D., Jin, L., Andrei, P., & Zheng, J. P. (2020). Communication—A Simple and Scalable Pre-Lithiation Approach for High Energy and Low Cost Lithium Ion Sulfur Batteries. Journal of The Electrochemical Society, 167(6), 060517. Retrieved from https://pubs.rsc.org/en/content/articlehtml/202 0/ee/d0ee00807a doi:10.1149/1945- | | | | | | | 1 | | | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|------------------------|---|---|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|-----------|
| | | | | 7111/ab8408 | | | | | | | | | | | | | | | | | \square |
| Anubi | Olugbe nga Moses | Electrical & Computer Engineering | Resilient, Robust and Adaptive Control Systems, Vehicle Dynamics and Control, Real-time Optimization, Robotics | Resilient Energy Delivery and Control System. (2020–2023). Funded by Department of Energy. Total award \$5,200,000. | | | | | | | 1 | | 1 | | | | | | | | |
| Arpan | Laura | Communicat ion | Attitudes and persuasion; processing of health and pro-environmental messages; adoption of alternative energy sources and technology related to environmental sustainability | Zihan Wang & Laura M Arpan (2020) Group affirmation influences acceptance of environmental risk messages, Applied Environmental Education & Communication, DOI: 10.1080/1533015X.2020.1726232 | | | 1 | | | | 1 | | | | | | 1 | | | | |
| Atkins | Jen | Dance | Cultural sustainability, identity, social justice through dance | Atkins, J. L. (presented 2019, November). "Cosplay with a Cause": Moving from Screen to Street in Hulu's The Handmaid's Tale. Paper presented at Moving Beyond Coloniality: Practices of Emancipation Across Performances of the Popular, PoP Moves: An International Research Group for Performances of the Popular. (International) | 1 | 1 | 1 | 1 | 1 | | | 1 | | 1 | 1 | | | | | 1 | |
| Atolia | Manoj | Economics | Macroeconomic stabilization in developing countries, understanding the impact of credit market, labor market, and information frictions on macroeconomic fluctuations and outcomes, implications of structural/microeconomic reforms on growth, welfare, and inequality | <u>"Optimal Control of a Global Model of Climate</u> Change with Adaptation and Mitigation," (with Prakash Loungani, Helmut Maurer, and Willi Semmler). IMF Working Paper No. 18/270, December, 2018 | | | | | | | | 1 | | 1 | | | 1 | | | | |
| Atwoo d | Alyssa | Earth, Ocean & Atmospheric Science | Tropical climate variability and change, isotope geochemistry, Paleoclimate data, models and theory | Atwood, A. R., Donohoe, A., Battisti, D. S., Liu, X., & Pausata, F. S. R. (2020). "Robust longitudinally variable responses of the ITCZ to a myriad of climate forcings." Geophysical Research Letters, 47, e2020GL088833. https://doi.org/10.1029/2020GL088833 | | | | | | | | | | | | | 1 | | 1 | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | 0 | 1 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------------|---------------|---|---|--|---|---|---|---|---|---|---|---|-----|---|---|----|----|----|----|----|----|
| Baco- Taylor | Amy R | Earth, Ocean & Atmospheric Science | Population, coral reef ecosystem | Ingels, Jeroen & Aronson, Richard & Smith, Craig & Baco, Amy & Bik, Holly & Blake, James & Brandt, Angelika & Cape, Mattias & Demaster, David & Dolan, Emily & Domack, Eugene & Fire, Spencer & Geisz, Heidi & Gigliotti, Michael & Griffiths, Huw & Halanych, Ken & Havermans, Charlotte & Huettmann, Falk & Ishman, Scott & Zamora-Duran, Angelica. (2020). Antarctic ecosystem responses following ice-shelf collapse and iceberg calving: Science Review and future research. Wiley Interdisciplinary Reviews Climate Change. 12. e682. 10.1002/wcc.682. | | | | | | | | | | | | | | 1 | | | |
| Barret t | Anne E | Sociology | Aging, gender, health, natural disasters | Douglas, R., Kocatepe, A., Barrett, A., Ozguven, E., & Gumber, C. (2019). Evacuating People and Their Pets: Older Floridians' Need for and Proximity to Pet- friendly Shelters. The Journals of Gerontology: Psychological Sciences and Social Sciences, 74(6), 1032-1040. | | | | | | | | | | | 1 | | 1 | | | | |
| Bass | Hank | Biological Science | Meiotic chromosome behavior, epigenomics and chromatin structure | Chromatin Structure and Genome Response in Maize (November 28, 2018) | | 1 | | | | | | | | | | | | | | | |
| Beerli | Peter | Scientific Computing | Biological sciences, population genetics | Beerli, P., Mashayekhi, S., Sadeghi, M., Khodaei, M., & Shaw, K. (2019). Population genetic inference with MIGRATE. Current Protocols in Bioinformatics, 68, e87. doi: 10.1002/cpbi.87 | | | | | | | | | | | | | | | 1 | | |
| Beitsc h | Leslie M. | Behavioral Science & Social Medicine | Medicine and public health collaboration and coordination, health systems quality improvement and workforce development, health impact of policy development/implementation | Pan K, Beitsch L, Gonsoroski E, Sherchan SP, Uejio CK, Lichtveld MY, Harville EW. Effects of Hurricane Michael on Access to Care for Pregnant Women and Associated Pregnancy Outcomes. Int J Environ Res Public Health. 2021 Jan 6;18(2):390. doi: 10.3390/ijerph18020390. PMID: 33419129; PMCID: PMC7825524. | | | 1 | | | | | 1 | | | | | 1 | | | | |
| Berlan | David | Public Administratio n | Nonprofit and NGO Management, Organization Theory and Behavior, Global Health Policy, Public and Nonprofit Financial Management, and International Development | Berlan, D., Freeman, A., Polischuk, L., & Peng, J. (presented 2019, November). Voluntary Action, Resilience, and Hurricane Michael. Paper presented at Annual Meeting, ARNOVA, San Diego, CA. (National) | | | | | | | | | | | | | 1 | | | | 1 |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------------------|---------------|--|--|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| Berna din | Shond a | Electrical & Computer Engineering | Digital Signal Processing, autonomous vehicles, broadening participation in minority engineering students | Ogunrinde and S. Bernadin, "A Review of the Impacts of Defogging on Deep Learning- Based Object Detectors in Self-Driving Cars," SoutheastCon 2021, 2021, pp. 01-08, doi: 10.1109/SoutheastCon45413.2021.9401941. | | | | 1 | | | | | | 1 | 1 | | | | | | |
| Berry | France s | Public Administratio n | Public and Strategic Management, Public Policy, Policy Innovation and Diffusion, State and Local Politics, Intergovernmental Relations, Program Evaluation | Madeline Powell & Frances Stokes Berry (2021) Introducing research insights into the third sector, social enterprise and public service delivery, Public Management Review, 23:5, 633-640, DOI: 10.1080/14719037.2020.1863700 | | | | | | | | | | | | | | | | | 1 |
| Bertra nd Jones | Tamar a C | Educational Leadership and Policy Studies | Sociocultural influences on socialization during graduate education and the professional experiences of underrepresented populations, particularly Black women, in academia | Nix, A., Bertrand Jones, T. C., & Hu, S. (2019). "The Panhandle is Different than the Peninsula": How rural colleges in Florida implemented education reform. Rural Sociology. | | | | 1 | | | | | | 1 | 1 | | | | | | |
| Bhard waj | Amit | COAPS | Hurricane track and Intensity forecast (SHIPS, SPIKE), Multi-model and Ensemble forecasting, Asian Monsoon, Dynamical downscaling and seasonal prediction, Regional RSM-NHM, RSM-ROMS coupled modeling, Numerical Weather Prediction and Improvement, WRF-ARW modeling | Vasubandhu Misra, Akhilesh Mishra, Amit Bhardwaj, A coupled ocean-atmosphere downscaled climate projection for the peninsular Florida region, Journal of Marine Systems, Volume 194, 2019, Pages 25-40, ISSN 0924-7963, https://doi.org/10.1016/j.jmarsys.2019.02.010. | | | | | | | | | | | | | | 1 | | | |
| Boel- Studt | Shamr a | Social Work | At-risk youth, child welfare, evidence-based practice, family practice, juvenile justice, residential treatment, social policy, youth trauma and victimization | McKinley, C., Boel-Studt, S., Renner, L., Figley, C., & Billiot, S. (2020). The Historical Oppression Scale: Conceptualization and measurement of historical oppression among indigenous peoples of the United States. Transcultural Psychiatry (Impact Factor: 1.98), 57, 288-303. doi:/10.1177/1363461520909605 | | | | | | | | | | 1 | | | | | | 1 | |
| Born | Patrici a | Risk Managemen t and Insurance | Insurance Economics, Liability, Insurance Regulation, Health Insurance, Catastrophe Modeling | Aseervatham, V., Born, P., Lohmaier, D., & Richter, A. (2017). Hazard-Specific Supply Reactions in the Aftermath of Natural Disasters. Geneva Papers on Risk and Insurance-Issues and Practice 42(2). | | | 1 | | | | | | | | 1 | | 1 | | | | |
| Boura ssa | Mark A | Earth, Ocean & Atmospheric | Air/sea interaction, remote sensing related to air/sea interaction and precipitation, and data fusion | Barker CH, Kourafalou VH, Beegle-Krause C, Boufadel M, Bourassa MA, Buschang SG, Androulidakis Y, Chassignet EP, Dagestad K- | | | | | | | | | | | | | | 1 | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 1 | 0 1 | 1 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|---------------|--------------------------------|---|--|---|---|---|---|---|---|---|----|---|-----|---|----|----|----|----|----|----|
| | | Science | | F, Danmeier DG, Dissanayake AL, Galt JA, Jacobs G, Marcotte G, Özgökmen T, Pinardi N, Schiller RV, Socolofsky SA, Thrift-Viveros D, Zelenke B, Zhang A, Zheng Y. Progress in Operational Modeling in Support of Oil Spill Response. Journal of Marine Science and Engineering. 2020; 8(9):668. https://doi.org/10.3390/jmse8090668 | | | | | | | | | | | | | | | | | |
| Bozec | Alexan dra | COAPS | HYCOM developments, tides in the Gulf of Mexico and ocean-ice interactions | Tsujino, H., Urakawa, L. S., Griffies, S. M., Danabasoglu, G., Adcroft, A. J., Amaral, A. E., Arsouze, T., Bentsen, M., Bernardello, R., Böning, C. W., Bozec, A., Chassignet, E. P., Danilov, S., Dussin, R., Exarchou, E., Fogli, P. G., Fox-Kemper, B., Guo, C., Ilicak, M., Iovino, D., Kim, W. M., Koldunov, N., Lapin, V., Li, Y., Lin, P., Lindsay, K., Liu, H., Long, M. C., Komuro, Y., Marsland, S. J., Masina, S., Nummelin, A., Rieck, J. K., Ruprich- Robert, Y., Scheinert, M., Sicardi, V., Sidorenko, D., Suzuki, T., Tatebe, H., Wang, Q., Yeager, S. G., and Yu, Z.: Evaluation of global ocean–sea-ice model simulations based on the experimental protocols of the Ocean Model Intercomparison Project phase 2 (OMIP-2), Geosci. Model Dev., 13, 3643– 3708, https://doi.org/10.5194/gmd-13-3643- 2020, 2020 | | | | | | | | | | | | | | 1 | | | |
| Breith aupt | Joshua | FSU Coastal & Marine Lab | Biogeochemistry, Geomorphology, Ecology, Sediment Dynamics | Chambers, L. G., Steinmuller, H. E., and Breithaupt, J. L 2019. Toward a mechanistic understanding of "peat collapse" and its potential contribution to coastal wetland loss. Ecology 100(7):e02720. 10.1002/ecy.2720 | | | | | | | | | | | | | | | 1 | | |
| Brews ter | Karin | Sociology | Social Demography, Sexual & Reproductive Health, Family Life Course | Bulut, E., & Brewster, K. L. (2021). Psychological Distress in Middle Eastern Immigrants to the United States: A Challenge to the Healthy Migrant Model? Social Science & Medicine, 274. Retrieved from https://www.sciencedirect.com/science/article/ pii/S0277953621000976 doi:https://doi.org/10.1016/j.socscimed.2021.1 13765 | | | 1 | | | | | | 1 | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------------------|---------------|---|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Brook e | Sandra D. | FSU Coastal & Marine Lab | Marine ecology, invertebrate ecology, invertebrate life histories, physiology and community structure | The Apalachicola Bay System Initiative (Grant 2019-2024) | | | | | | | | 1 | | | | | | 1 | | | |
| Broom e | Jeff | Art Education | Narrative inquiry, cultural diversity, multi-age art education, and caring approaches to art curricula. | Broome, J. (in press). Lucia Herrera: Teaching art in a migrant farmworkers' community. In Real lives 21: Showcasing the stories of art educators and contemporary learning (20 pages). Alexandria, VA: National Art Education Association. | | | | 1 | | | | | | | 1 | | | | | | |
| Browe r | Rebec ca | Center for Postseconda ry Success | Qualitative research methods and institutional policies in higher education, particularly those which facilitate student encounters with difference and foster success for students from underrepresented groups | Brower RL, Bertrand Jones T, Hu S. Overcoming the "Trash Talk in Your Head": Extending an Ethic of Care to Students Experiencing Intersectional Stigma in Community College. AERA Open. January 2021. doi:10.1177/23328584211006381 | | | | 1 | 1 | | | | | 1 | | | | | | | |
| Brown | Jeff | Urban and Regional Planning | Planning History; Public Transit Planning and Policy; State and Federal Transportation Policy. Transportation and Land Use; Transportation Finance; Transportation Planning; Travel Behavior Analysis; Travel Demand Analysis; Urban History. | Mendez, J., & Brown, J. (2019). The Relationship between Streetcars and Development Activity: An Examination of Portland and Seattle. Transportation Research Record, 2673 (2), 172-182. doi:10.1177/0361198119825647 | | | | | | | | | | | 1 | | | | | | |
| Brown Speig hts | Joedre cka | Family Medicine and Rural Health | Health Equity, Maternal and Child Health including Adolescent Health, Black Infant Mortality, Community-Engaged Research, Underrepresented in Medicine Mentorship, Resilience and Wellness, and Faculty Development | Brown Speights, J. S., Goldfarb, S., Levine, R., & Rust, G. (2019). Racial Equality in Infant Outcomes: A Call to Action. American Journal of Public Health, 109, no. 5, 666-668. doi:10.2105/AJPH.2019.305028 | | | 1 | 1 | | | | | | 1 | 1 | | | | | | |
| Broxte rman | Daniel A | Risk Managemen t and Insurance | Human capital divergence in growing economy, housing prices, location of Hispanic workers | Broxterman, Daniel, House Prices and the Skill Mix of Cities: Testing Models Using the Location of Hispanic Workers (November 16, 2019). Available at SSRN: https://ssrn.com/abstract=3109988 or http://dx.doi.org/10.2139/ssrn.3109988 | | | | | | | | | | | 1 | | | | | | |
| Buggs | Shante I G | Sociology | Race & Ethnicity; Family and Romantic/Intimate Relationships; Identities; Culture | Buggs, S.G. (2019), Color, Culture, or Cousin? Multiracial Americans and Framing Boundaries in Interracial Relationships. J. Marriage Fam, 81: 1221-1236. https://doi.org/10.1111/jomf.12583 | | | | | | | | | | 1 | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | D | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|----------------------|---|---|--|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|
| Buhrm an | Kristin a | Religion | Religion and science in East Asia, disasters, time and cosmology, histiography and theory | Buhrman, K. M. (2020). The 1096 Eichō Earthquake and Tsunami. Arcadia: Environment and Society Portal, 14. Retrieved from http://www.environmentandsociety.org/arcadi a/1096-eicho-earthquake-and-tsunami doi:doi.org/10.5282/rcc/9035/ | | | 1 | | | | | | | | 1 | | 1 | | | | |
| Burdet te | Amy M | Sociology | Health, religion, gender, socioeconomic status and physical health, exposure to environmental toxins | Brailsford, J.M., Eckhardt, J., Hill, T.D., Burdette, A.M. and Jorgenson, A.K. (2019), "Race, Environmental Inequality, and Physical Health", Underserved and Socially Disadvantaged Groups and Linkages with Health and Health Care Differentials (Research in the Sociology of Health Care, Vol. 37), Emerald Publishing Limited, Bingley, pp. 71-86. https://doi.org/10.1108/S0275- 495920190000037009 | | | 1 | | | | | | 1 | | | 1 | | | | | |
| Burge ss | Scott Clayto n | Biological Science | Population biology of coastal marine invertebrates; larval dispersal, population connectivity, spatial population dynamics, life history evolution, adaptive phenotypic plasticity, maternal effects, and local adaptation | Edmunds, P. J., & Burgess, S. C. (2020). Emergent properties of branching morphologies modulate the sensitivity of coral calcification to high PCO2. Journal of Experimental Biology, 223, 1-6. Retrieved from https://jeb.biologists.org/content/223/8/jeb217 000 | | | | | | | | | | | | | | 1 | | | |
| Butler | William | Urban and Regional Planning | Collaborative governance, Natural resources management, Environmental planning and management, Social-ecological resilience, Sustainability, Public participation and community involvement | Vella, K., Butler, W., Sipe, N., Chapin, T., Murley, J., & Olvera-Garcia, J. (submitted). How Can Voluntary Collaboration Advance Climate Change Adaptation Planning and Policy? Evaluating the Southeast Florida Regional Climate Change Compact. Journal of Planning Education and Research. Manuscript submitted for publication. | | | | | | | | | | | 1 | | 1 | | | | 1 |
| Cai | Ming | Earth, Ocean & Atmospheric Science | Physics of climate impact of land use changes, large-scale atmospheric motion and short-time climate variability | Yu, Y-Y, Taylor, P. C., & Cai, M. (2019). Seasonal variations of Arctic low-level clouds and its linkage to sea ice seasonal variations. JGR Atmosphere. Retrieved from https://agupubs.onlinelibrary.wiley.com/doi/full /10.1029/2019JD031014 doi:10.1029/2019JD031014. | | | | | | | | | | | | | 1 | | 1 | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------------------|---------------|---|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Callen der | Cliff | Music Theory and Composition | Mathematics, including self-similarity and infinite canons, quotient spaces and voice leading, calculus and tempo, and aperiodic rhythms and tilings associated with continued fractions | Dear Matafele Peinam for mezzo soprano and orchestra | | | | | | | | | | | 1 | | 1 | | | | |
| Cano- Urbina | Javier | Economics | Labor markets in developing countries, non- production benefits of human capital, applied microeconomics and econometrics | The Effects of the BP Deepwater Horizon Oil Spill on Housing Markets. Journal of Housing Economics, Volume 43, March 2019, Pages 131-156, with Christopher Clapp and Kevin Willardsen. | | | | | | | | 1 | | | | 1 | | | | | |
| Carlso n | Elwoo d | Sociology | Aging, Family, Health | Bulut, E., & Carlson, E. D. (2020). Labor Force Participation among MENA Women in the United States: Exploring the Role of Ethnically Homogamous Relationships. International Migration, 58(5), 235-254. | | | | | 1 | | | 1 | | 1 | | | | | | | |
| Carr | Dawn | Sociology | Health and Aging, Volunteering, Work/Retirement, Caregiving | Calvo, R., Carr, D., & Matz-Costa, C. (2019). Expanding the happiness paradox: Ethnoracial disparities in life satisfaction among older immigrants in the United States. Journal of Aging and Health, 31(2), 231-255. doi:10.1177/0898264317726608 | | | 1 | | | | | | | 1 | | | | | | | |
| Carret ta | Henry | Social Work | Evaluation of publicly funded programs (e.g. Medicaid waivers), chronic disease epidemiology, medical care service utilization among adults with Autism Spectrum Disorder and/or Intellectual Disability | Hu, Tingting and Carretta, Henry J. (2020) "Comorbidities of Medicare Beneficiaries with Alzheimer's Disease in Florida, 2010," Florida Public Health Review: Vol. 17, Article 1. Available at: https://digitalcommons.unf.edu/fphr/vol17/iss1 /1 | | | 1 | | | | | | | | | | | | | | |
| Chaco n- Patino | Martha | NHMFL | Asphalt binders, polycyclic aromatic hydrocarbons (PAHs), petroleum-derived materials | Sydney F. Niles, Martha L. Chacón-Patiño, Samuel P. Putnam, Ryan P. Rodgers, and Alan G. Marshall. Environmental Science & Technology 2020 54 (14), 8830-8836. DOI: 10.1021/acs.est.0c02263 | | | | | | | | | | | | 1 | | | | | |
| Chagn on | Jeff | Earth, Ocean & Atmospheric Science | Weather prediction and modeling, cloud interaction within larger organized climate systems | Brannan, A., & Chagnon, J. M. (in press). A Climatology of the Extratropical Flow Response to Recurving Atlantic Tropical Cyclones. Monthly Weather Review, 18 pages. | | | | | | | | | | | | | 1 | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3 9 | 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|---------------|---|--|---|---|---|---|---|---|---|---|-----|---|---|----|----|----|----|----|----|----|
| Chant on | Jeffery P | Earth, Ocean & Atmospheric Science | Chemical oceanography, geochemistry, environmental geology, permafrost decomposition in the arctic, wetlands, food webs, methane emissions | Drake, T., Podgorski, D., Dinga, B., Chanton, J., Six, J., Spencer, R. 2020. Land-use controls on carbon biogeochemistry in lowland streams of the Congo Basin. Global Change Biology. https://doi.org/10.1111/gcb.14889 | | | | | | | | | | | | | 1 | 1 | 1 | | |
| Charn ess | Neil | Psychology | The aging process and its implications for technology use (particularly for health), work performance, expert performance, older drivers and pedestrian safety | Yoon J-S, Charness N, Kohlbacher F. Shaking Confidence in Technology: Effects of an Earthquake-Induced Nuclear Disaster on Technology Adoption in Middle-Aged and Older Adults. Journal of Applied Gerontology. 2021;40(5):500-509. doi:10.1177/0733464819895208 | | | | | | | | 1 | | | | 1 | 1 | | | | |
| Chass ignet | Eric P | Earth, Ocean & Atmospheric Science | Climate variability from coupled ocean- atmosphere modeling and observations, thermohaline circulation, western boundary currents, associated eddies and their impact on the world ocean circulation | Morey, S., G. Gopalakrishnan, E. Pallas Sanz, J. Marcos Azevedo CorreiaDe Souza, K. Donohue, P. Perez-Brunius, D. Dukhovskoy, Chassignet, E. P., B. Cornuelle, A. Bower, H. Furey, P. Hamilton, & J. Candela. (2020). Assessment of numerical simulations of deep circulation and variability in the Gulf of Mexico using recent observations. J. Phys. Oceanog, 50, 1045- 1064. doi:10.1175/JPO-D-19-0137.1 | | | | | | | | | | | | | 1 | 1 | | | |
| Chen | Gang | Civil & Environment al Engineering | Subsurface Water Flow; Pollutant Transport Modeling; Bioremediation Kinetics; Genetic Microbiology; Interfacial Phenomena | Makhtoumi, Yashar; Li, Simeng; Ibeanusi, Victor; Chen, Gang. 2020. "Evaluating Water Balance Variables under Land Use and Climate Projections in the Upper Choctawhatchee River Watershed, in Southeast US" Water 12, no. 8: 2205. https://doi.org/10.3390/w12082205 | | | | | | 1 | | | | | | | | | | | |
| Cheng | Yingm ei | Finance | Theoretical and empirical corporate finance, natural disasters | Cheng, Yingmei and Park, Jonghan and Pierce, Spencer and Zhang, Tianming (Tim), Big Bath Accounting Following Natural Disasters (December 19, 2019). Available at SSRN: https://ssrn.com/abstract=3305478 or http://dx.doi.org/10.2139/ssrn.3305478 | | | | | | | | 1 | | | | | 1 | | | | |
| Choi | Juyeon g | Civil & Environment al Engineering | Infrastructure planning for sustainability and resilience; Infrastructure system-of-systems; Construction project management; Capital rehabilitation planning; Pre-demolition | Assessment of Transportation Systems Resilience for Vulnerable Communities and Populations | | | | | | | | 1 | | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|----------------|---|---|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| | | | planning | | | | | | | | | | Τ | | | | | | | | |
| Christi e | Donna | Law | Ocean and coastal management law | Ocean and Coastal Management Law in a Nutshell (with Anastasia Telesetsky) (5th ed., West 2019) | | | | | | | | | | | | | | 1 | | | |
| Chung | Hoyon g | Chemical & Biomedical Engineering | Bio-inspired polymers, Smart materials, Catalysts for polymers | Liu, H., Mulderrig, L., Hallinan, D., Chung, H., Lignin-Based Solid Polymer Electrolytes: Lignin-Graft-Poly(ethylene glycol). Macromol. Rapid Commun. 2021, 42, 2000428. https://doi.org/10.1002/marc.202000428 | | | | | | | | | 1 | | | | | | | | |
| Clark | Clayto n | Civil & Environment al Engineering | Hazardous Waste Management & Contaminant Degradation, Site Monitoring & Delineation, Water Resources Engineering & Hydrology, Environmental & Water Chemistry, Pollutant Transport, Remediation of Contaminated Soil and Water Systems | HBCU DCL-EAGER Collaborative Engineering of a Biodegradable Polymer for Treatment of Various Water Systems | | | | | | 1 | | | | | | 1 | | | | | |
| Clarke | Allan J | Earth, Ocean & Atmospheric Science | Climate dynamics, El Nino predictions, equatorial & shelf water dynamics, sea level rise | Clarke, A. J., & Zhang, X. (2019). On the physics of the warm water volume and El Niño/La Niña predictability. Journal of Physical Oceanography, 49(6), 1541-1560. doi:10.1175/JPO-D18-0144.1 | | | | | | | | | | | | | 1 | 1 | | | |
| Cogan | Nichol as G | Mathematics | Bacterial dynamics, Fluid/structure interaction, Sensitivity methods, Uncertainty | V. Luongo, M.R. Mattei, L. Frunzo, B. D'Acunto, K. Gupta, S. Chellam, N.G. Cogan. A transient biological fouling model for constant flux microfiltration. arXiv:2104.03996 [physics.bio-ph] | | | | | | 1 | | | | | | | | | | | |
| Colem an | Eric A | Political Science | Collective action, environmental policy, developing countries | Forrest Fleischman, Shishir Basant, Ashwini Chhatre, Eric A Coleman, Harry W Fischer, Divya Gupta, Burak Güneralp, Prakash Kashwan, Dil Khatri, Robert Muscarella, Jennifer S Powers, Vijay Ramprasad, Pushpendra Rana, Claudia Rodriguez Solorzano, Joseph W Veldman, Pitfalls of Tree Planting Show Why We Need People- Centered Natural Climate Solutions, BioScience, Volume 70, Issue 11, November 2020, Pages 947–950, https://doi.org/10.1093/biosci/biaa094 | | | | | | | | | | | | | 1 | | 1 | | 1 |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 ! | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|--|--|---|---|---|---|-----|---|---|---|---|----|----|----|----|----|----|----|----|
| Colon | Marco s | Modern Languages & Linguistics | Environment and Ecology of the Amazon; Ecocriticism; Postcolonial Studies; Ecopoetry/Ecofilm; Animal/Animality Studies | Slow Violence and Slow Seeing in Beyond Fordlândia". Ioris, A.A.R., Ioris, R.R. Shubin, S. (eds.). 2020. In Frontiers of Development in the Amazon: Riches, Risks and Resistances. Lexington Books: Lanham, Maryland. (June) | | | | | | | | | | 1 | | | | | 1 | |
| Coope r | William | Chemistry & Biochemistry | Bioanalytical, Environment and Energy, organic chemistry of natural waters and sediments | Environ. Sci.: Water Res. Technol., 2021, Advance Article. https://doi.org/10.1039/D1EW00020A | | | | | | 1 | | | | | | | 1 | | | |
| Coutts | Chris | Urban and Regional Planning | Ecologically-sensitive land use practices on community health and health behavior | Coutts, C., Holmes, T. & Jackson, A. (2019). Forestry policy, conservation activities, and ecosystem services in the remote Misuku Hills of Malawi. Forests, 10(2), 1056. | | | | | | | | | | | | | | 1 | | |
| Сох | Brad | Educational Leadership and Policy Studies | Factors that shape college experiences and outcomes for historically underserved students (particularly those with disabilities) | Autism-Related Characteristics in College STEM Students: Prevalence, Performance, and Mediation | | | | 1 | | | | | 1 | | | | | | | |
| Cresw ell | Michae I | History | International politics, the Cold War, and military affairs | Creswell, M. (2019). Wasted Words? The Limits of U.S. Strategic Communication and Public Diplomacy. Studies in Conflict & Terrorism, 42, 464-492. Retrieved from https://www.tandfonline.com/doi/pdf/10.1080/ 1057610X.2017.1392097?needAccess=true doi:10.1080/1057610X.2017.1392097 | | | | | | | | | | | | | | | 1 | |
| Cronin | J. Joseph | Marketing | Green consumption, Quality, Value, Satisfaction, and Outcomes conceptualization, measurement, and strategies and Sports Marketing | Mark R. Gleim, Jeffery S. Smith & J. Joseph Cronin Jr. (2019) Extending the institutional environment: the impact of internal and external factors on the green behaviors of an individual, Journal of Strategic Marketing, 27:6, 505-520, DOI: 10.1080/0965254X.2018.1454498 | | | | | | | | | | | 1 | | | | | |
| Cui | Hongc hang | Biological Science | Cell fate specification and reprogramming in plants; evolutionary and developmental biology; plant-environment interaction | Cui, H. (contract). C3-to-C4 engineering – the next wave of green revolution. In "Genetic Engineering of Plants – Enhancing Productivity and Product Value." Eds. Trivedi, P.K. and Nath, P Manuscript under contract for publication, John Willey & Sons. | | | | | | | | | | | | | | 1 | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|---|---|---|---|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| Culver | Annika | History | Manchuria/Manchukuo, Japanese cultural imperialism, wartime politics and the arts in East Asia, wartime propaganda/advertising, gender and consumption, Sino-Japanese relations, US-Japan relations, and postwar environmental history in Korea and Japan | Japan's Empire of Birds: Aristocrats, Anglo- Americans, and Transwar Ornithology (Bloomsbury Press, forthcoming early 2022). | | | | | | | | | | | | | | | 1 | 1 | |
| Cuyler | Antoni o | Art Education | Arts Administration Education, Creative Justice Issues in the Cultural Sector | Cuyler, A. C. (2021). Access, Diversity, Equity and Inclusion in Cultural Organizations Insights from the Careers of Executive Opera Managers of Color in the U. S. New York, NY: Routledge. | | | | | 1 | | | | | | 1 | | | | | | |
| Davis | Katrine II | Sociology | Work/Labor; Urban Inequalities; Sociology of Poverty; Social Determinants of Health; Environmental Justice; Drinking Water in Flint, Michigan | Davis, K. (contract). Tainted Tap: Flint's Journey From Crisis to Recovery. Manuscript under contract for publication, University of North Carolina Press. | 1 | | | | | 1 | | | | | 1 | | | | | | |
| DeGio rgi | Andrea | Classics | Roman Visual Culture; the Roman Provinces; the Archaeology of Late Antiquity | De Giorgi, Andrea U. "Sustainable Practices? A Story from Roman Cosa (Central Italy)." Journal of Mediterranean Archaeology 31, no. 1 (January 2018): 3–26. doi:10.1558/jma.36807. | | | | | | 1 | | | I | | | | | | | | |
| Dewar | William | Earth, Ocean & Atmospheric Science | Dynamics of the ocean at scales from 100 km to 10,000 km, or from the deformation scale to the basin scale | Jamet, Q., Dewar, W. K., Wienders, N., & Deremble, B. (in press). Fast Warming of the Surface Ocean Under A Climatological Scenario. Geophysical Research Letters, 10 pages. | | | | | | | | | | | | | 1 | 1 | | | |
| Dicke y | Sabrin a | Nursing | Health disparity of prostate cancer among Black men which includes the physical, psychological and psychosocial aspects of the disease; Cancer and general health information disclosure as a context for increasing awareness of cancer screenings and overall healthy behaviors | Whyte, J., Whyte, M., & Dickey, S. (In press). "A Study of HIV Positive Undocumented African Migrants' Efforts to Access Health Services in the UK". Journal of Nursing Education and Practice. | | | 1 | | | | | | | 1 | | | | | | | |
| Doan | Petra L. | Urban and Regional Planning | Planning for Developing Areas, Housing and Community Development, Planning for LGBTQ Communities | Cofield, R., & Doan, P. L. (in press). Toilets and the Public Imagination: Planning for Safe and Inclusive Spaces. In Banu Gökarıkse, Michael Hawkins, Christopher Neubert, & Sara Smith (Eds.), Feminist Geography Unbound: Intimacy, Territory, and Embodied Power. West Virginia University Press. | | | | | | | | | | 1 | 1 | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|------------------|--|---|---|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| Doel | Ronald E. | History | History of science and technology, including environmental policy | Fellowship at the Rachel Carson Center in Germany in June 2019 | | | | | | | | | | | | | | | 1 | |
| Dong | Shengl i | Educational Leadership and Policy Studies | Workplace and academic accommodations, transition issues to work and postsecondary education for youth with disabilities, mindfulness in counseling, multicultural counseling, and social justice in counseling | Dong, S., Ethridge, G., & Rodgers- Bonaccorsy, R. (2019). Rehabilitation counselor educators' experiences of social injustice and social justice infusion. Journal of Rehabilitation Research, Policy, and Education, 33(4), 13. doi:http://dx.doi.org/10.1891/2168- 6653.33.4.221 | | | | 1 | | | | 1 | 1 | | | | | | | |
| Drake | Jamil William | Religion | Souls of black folk, American folk studies, racial politics of religious cultures in American South | Drake, J. W. (2020). Before the Tuskegee Experiment: Folk Religion and the Medical Engineering of Black Tenant Farmers and Sharecroppers in Macon County. Journal of American Academy of Religion, 88, 32. | | | 1 | | | | | | 1 | 1 | | | | | | |
| Du | James | Sport Managemen t | Consumer behavior and psychology within various sports and recreational settings | Sato, M., Inoue, Y., Du, J., & Funk, D. C. (2019). Access to parks and recreational facilities, physical activity, and health care costs for older adults: Evidence from U.S. counties. Journal of Leisure Research, 50(3), 220-238. | | | 1 | | | | | | | | | | | | | |
| Duart e | Rob | Art | Politics embedded in all technology, social, political, and cultural aspects of technology, sculptures and installations | Director of REBOOT Laboratory (https://reboot.art.fsu.edu/) | | | | | | | | | | 1 | | | | | | |
| Dukho vskoy | Dmitry | COAPS | Freshwater pathways in the Arctic Ocean and the sub-Arctic seas, Arctic climate variability, Air-sea interaction in high latitudes, Strong currents in the deep Gulf of Mexico, Loop Current variability | Dukhovskoy, D.S., S.M. Morey, E.P. Chassignet, X.Chen, V.J. Coles, L. Cui, C.K. Harris, R. Hetland, TJ. Hsu, A.J. Manning, M. Stukel, K. Thyng, & J. Wang, 2021. Development of the CSOMIO coupled ocean- oil-sediment-biology model. J. Frontiers in Marine Science, 50, in press | | | | | | | | | | | | | 1 | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|---------------|---|--|---|---|---|---|---|---|---|---|----|---|---|----|----|----|----|----|----|----|
| Duleb enets | Maxim | Civil & Environment al Engineering | Operations Research, Optimization and Simulation Modeling, Metaheuristics, Hybrid Algorithms, Evolutionary Computation, Transportation Engineering | Dulebenets, M.A.CA, Pasha, J.SA, Kavoosi, M.SA, Abioye, O.F.SA, Ozguven, E.E., Moses, R., Boot, W.R., & Sando, T, 2020. Multiobjective Optimization Model for Emergency Evacuation Planning in Geographical Locations with Vulnerable Population Groups. Journal of Management in Engineering, ASCE, Vol. 36 (2), Article 04019043. DOI: 10.1061/(ASCE)ME.1943- 5479.0000730 | | | | | | | 1 | | | | | | | | | | |
| Dunca n | Mike | Urban and Regional Planning | Transportation planning and policy, transportation and land use connections, station area planning, bike/pedestrian planning, travel behavior | Duncan, M. (in press). Would the replacement of park-and-ride facilities with transit-oriented development reduce vehicle kilometers traveled in an auto-oriented US region? Transport Policy. https://doi.org/10.1016/j.tranpol.2017.12.005 | | | | | | | | | | | 1 | | | | | | |
| DuVal | Emily H | Biological Science | Behavioral ecology, population genetics, and in the role of sexual selection in speciation | Jones, B.C. and E.H. DuVal. (2019) Direct and indirect effects of the El Nino Southern Oscillation on development and survival of young of a tropical passerine. Oecologia. 190 (2): 485-496. | | | | | | | | | | | | | | | 1 | | |
| Ebene r | Debor ah | Educational Psychology and Learning Systems | Psychosocial aspects of disability, including humor and disability, substance abuse and quality of life, and adaptation to disability group interventions | Fioramonti, D., Ebener, D., & Arrastia, M. (in press). Religious/spiritual involvement and beliefs, frequency of contact, and gender as predictors of attitudes toward persons with disabilities. Rehabilitation Counseling Bulletin, 30 pages. | | | | | | | | | | 1 | | | | | | | |
| Elsner | James | Geography | Hurricanes, tornadoes, climate, spatial statistics | Walsh, K., Carmago, S., Vecchi, G., Daloz, A., & Elsner, J. (in press). Hurricanes and climate: the U.S. CLIVAR working group on hurricanes. Bulletin of the American Meteorological Society. | | | | | | | | | | | | | 1 | | | | |
| Ernst | Kassie | Engineer Undergrad Acad & Stdt | Climate change adaptation; Urban resilience and sustainability; Energy-Water nexus; Climate services ; Science Co-Production | Ernst, K. M., & Preston, B. L. (2020). Applying the Knowledge Product Evaluation (KnoPE) Framework to two urban resilience cases in the United States. Environmental Science & Policy, 107, 7-22. | | | | | | 1 | 1 | | | | 1 | | 1 | | | | 1 |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|----------------|--|--|--|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|
| Etsch maier | Maximi lian | B. Analytics InfoSys. S. Chain (BAISSC) | Analysis, Design, and Operation of Purposeful Systems Planning, Design, Operation and Maintenance of Systems of Transportation, Logistics, and "Smart Manufacturing;" Environmental Regulation and Global Sustainability | Designing an Ethical System of Global Sustainability as a Purposeful System: GEBAT, Global Equity of the Burden Added Tax, The International Journal of Sustainability Policy and Practice, Vol. 14, issue 1, pp 17-35, 2018. doi:10.18848/2325- 1166/CGP/v14i01/17-35. | | | | | | | | | | | 1 | | 1 | | 1 | | |
| Eyerly | Sarah | Musicology | Eighteenth-century music, performance practice and applied musicology, sound studies and geo-humanities (GIS, sound mapping, digital musicology, soundscape recording and composition, audible history), ecomusicology (sound ecology and environmental humanities), Native American and Indigenous Studies, music and religion in early America, data humanities and network visualization, archaeomusicology, global music history, early modern studies, eighteenth-century studies. | Moravian Soundscapes: A Sonic History of the Moravian Missions in Early Pennsylvania (Bloomington: Indiana University Press, 2020). | | | | | | | | | | | 1 | | | | | | |
| Fang | Kerry (Li) | Urban and Regional Planning | Economic development and land use, encroachment into agricultural areas, sprawling development patterns and pollution | Fang, L, Howland, M, Kim, J, Peng, Q, Wu, J. Can transfer of development rights programs save farmland in metropolitan counties? Growth and Change. 2019; 50: 926–946. https://doi.org/10.1111/grow.12305 | | | | | | | | | | | | | | | 1 | 1 | |
| Faruq ue | Omar | Electrical & Computer Engineering | Design of all-electric ship; Digital real-time simulation including HIL testing; Energy Management and Efficiency; Modeling and simulation of power systems; Power system stability and wide area monitoring. Smart Grid and Renewable; Energy Integration | Ospina, J., Gupta, N., Newaz, A., Harper, M., Faruque, M. O., Collins, E. G., & Meeker, R. (2019). Sampling-Based Model Predictive Control of PV-Integrated Energy Storage System Considering Power Generation Forecast and Real-Time Price. IEEE Power and Energy Technology Systems Journal, 6(4), 195-207. doi:10.1109/JPETS.2019.2935703 | | | | | | | 1 | | 1 | | | | | | | | |
| Fay | Daniel | Public Administratio n | Public Management, Public Policy, Higher Education, Veteran Affairs | Polischuk, L., & Fay, D.L. (2020). "Administrative Response to Consequences of COVID-19 Emergency Responses: Observations and Implications From Gender- Based Violence in Argentina." <i>The American</i> <i>Review of Public Administration</i> , vol. 50, no. 6–7, pp. 675–684. | | | | | | | 1 | | 1 | | | | | | | | 1 |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|---|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Felkn er | John | Urban and Regional Planning | International Planning, Planning in Developing Areas, Transportation and Environmental Planning in the Context of Global Rapid Urbanization and Economic Development | Perez-Felkner, L., Felkner, J., Nix, S., & Magalhães, M. (2019). The Puzzling Relationship between Development and Gender Equity: The Case of Postsecondary Education in STEM and STEM-Related Fields in Cambodia. International Journal of Educational Development. | | | | | | | | | | 1 | 1 | | | | | | |
| Fendl er | Rachel | Art Education | Critical theory, visual culture, youth studies, learning mobilities, nonformal learning, collaborative research, qualitative inquiry, arts-based and arts informed research methodologies | Rachel Fendler, Sara Scott Shields & Danielle Henn (2020) #thefutureisnow: A Model for Civically Engaged Art Education, Art Education, 73:5, 10-15, DOI: 10.1080/00043125.2020.1766922 | | | | 1 | | | | | | | | | | | | | |
| Feng | Xiao | Geography | Biogeography, ecological niche modeling/species distribution modeling, biodiversity informatics, macroecology, human-caused environmental changes, ecoclimate teleconnection, big-data, high performance computing, GIS | Feng, X., Merow, C., Liu, Z. et al. How deregulation, drought and increasing fire impact Amazonian biodiversity. Nature (2021). https://doi.org/10.1038/s41586-021- 03876-7 | | | | | | | | | | | | | 1 | | 1 | | |
| Foo | Simon | Electrical & Computer Engineering | Photovoltaics, Multi-junction III-V compound Solar Cells, Organic/Polymer Solar Cells, Quantum Dot Solar Cells, Perovskite Solar Cells | DG Moye, PL Moss, X Chen, W Cao, S. Y. Foo, "Observations on Arrhenius Degradation of Lithium-Ion Capacitors," Materials Sciences and Applications 11 (7), 450-461, 2020. | | | | | | | 1 | | | | | | | | | | |
| Frankl in | Joseph | Psychology | How suicidal thoughts come about, what causes someone to initiate suicidal behavior, how to interrupt the processes that produce suicidal thoughts and behaviors | Guzman, E., Cha, C., Ribeiro, J., & Franklin, J. (2019). Suicide Risk Around the World: The Potential Role of Mental Health Structural Stigma. Social Psychiatry and Psychiatric Epidemiology, 54, 1459-1470. | | | 1 | | | | | | | | | | | | | | |
| Fuelb erg | Henry E | Earth, Ocean & Atmospheric Science | Synoptic and Mesometeorology, Lightning, Long-range transport of pollutants and emissions | Preston, A. D., Fuelberg, H. E., & Barth, M. (2019). Simulation of chemical transport by Typhoon Mireille (1991). Journal of Geophysical Research, 11614-11639. doi:https://doi.org/10.1029/2019JD030446 | | | | | | | | | | | | 1 | 1 | | | | |
| Fuent es | Marian a | Earth, Ocean & Atmospheric Science | Conservation of marine mega-fauna; resilience of marine mega-fauna; spatial ecology of marine mega-fauna | Fuentes, M.M.P.B., Allstadt, A.J., Ceriani, S.A. et al. Potential adaptability of marine turtles to climate change may be hindered by coastal development in the USA. Reg Environ Change 20, 104 (2020). https://doi.org/10.1007/s10113-020-01689-4 | | | | | | | | | | | 1 | | 1 | 1 | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 0 10 | 1 | 1 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|-----------------|---|---|--|---|---|---|---|---|---|---|-----|------|---|---|----|----|----|----|----|----|
| Galea no | Juan- Carlos | Modern Languages & Linguistics | Literature, Culture and the Environment; Latin American Poetry; Amazonian Folklore; Translation | Galeano, J. (in press). Amazonia: Looking for the Earthly Eden and Finding the Planet's Next Landfill. In Mark Anderson (Ed.), Ecological Crisis and Cultural Representation in Latin America (10 pages). Landham, Lexington Books. | | | | | | | | | | 1 | | 1 | | | 1 | | |
| Garcia Roig | Lilian | Art | Latinx works and botanical and nature-based themes | What's So Funny About the End of the World?, Todd Art Gallery, MTSU; Murfreesboro, TN | | | | | | | | | | | | | | | 1 | | |
| Garib aldi | Joseph ine | Dance | Devising of original performance works, intermedial performance works, environmental installations, video and site- based performance. | Illuminating Site: Birdsong Window Gardens | | | | | | | | | | | | | 1 | | | | |
| Gentr y | Rebec ca | Geography | Spatial ecological and socio-economic questions related to marine aquaculture development | Halley E. Froehlich, Rebecca R. Gentry, Sarah E. Lester, Richard S. Cottrell, Gavin Fay, Trevor A. Branch, Jessica A. Gephart, Easton R. White, Julia K. Baum, Securing a sustainable future for US seafood in the wake of a global crisis, Marine Policy, Volume 124, 2021, 104328, ISSN 0308-597X, https://doi.org/10.1016/j.marpol.2020.104328. | | | | | | | | | | | | | | 1 | | | |
| Giardi na | Michae I | Sport Managemen t | Physical culture and bio-politics, global sporting cultures, sport in post-9/11 America | Pu, H., Newman, J. I., & Giardina, M. D. (2019). Flying Solo: Globalization, Neoliberal Individualism, and the Contested Celebrity of Li Na. Communication and Sport, 7(1), 23-45. | | | | | | | | 1 | | 1 | | | | | | | |
| Gluec kauf | Robert L | Behavioral Science & Social Medicine | Development and evaluation of eHealth and community-based interventions for individuals with severe disabilities and their family caregivers, outcomes measurement, and spirituality and health | Meng, Hongdao & Marino, Victoria & Conner, Kyaien & Sharma, D. & Davis, W. Shuford & Glueckauf, Robert. (2019). Effects of in- person and telephone-based cognitive behavioral therapies on health services use and expenditures among African-American dementia caregivers with depressive symptoms. Ethnicity & Health. 1-14. 10.1080/13557858.2019.1590536. | | | 1 | | | | | | 1 | | | | | | | | |
| Goldfa rb | Saman tha | Behavioral Science & Social Medicine | Maternal and perinatal health, Maternal substance abuse, Health policy, Policy evaluation, Needs assessment | Brown, J., Goldfarb, S., & Rust, G. (2019). Racial Equality in Infant Outcomes - A Call to Action. American Journal of Public Health. | | | 1 | | | | | | 1 | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|------------------------------|-----------------|--|--|---|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| Gomo ry | Tomi | Social Work | Emergency housing, social service options, sexual exploitation, homelessness | Groton, D. B., & Gomory, T. (2021). Improving Housing Services for Youth Survivors of Sexual Exploitation: An Exploratory Study. National Youth-At-Risk Journal, 4(2). https://doi.org/10.20429/nyarj.2021.040204 | | | | | | | | | | 1 | | | | | 1 | |
| Gonza les- Brack en | Melind a | Human Developmen t & Family Science | Psychosocial well-being of Latino youth and families, how cultural stressors, cultural strengths, adolescent development, and family processes intersect to predict adolescent adjustment in the areas of self- esteem, depressive symptoms, and substance abuse | Rayburn, A.D., McWey, L.M. and Gonzales- Backen, M.A. (2021), Living Under the Shadows: Experiences of Latino Immigrant Families at Risk for Deportation. Fam Relat, 70: 359-373. https://doi.org/10.1111/fare.12534 | | | 1 | | | | | | 1 | | | | | | | |
| Grave n | Lucind a | Nursing | Improving outcomes for heart failure patients through the development and testing of cognitive-behavioral interventions at both the individual, dyad, and family levels | Abbott, L., Slate, E., & Graven, L. J. (2020). Cardiovascular Disease Risk among Rural Residents Living with Diabetes and Pre- diabetes: A Cluster Randomized Trial. Public Health Nursing, 37(1), 16-24. doi:10.1111/phn.12659 | | | 1 | | | | | | 1 | 1 | | | | | | |
| Grave s | Kately n | Behavioral Science & Social Medicine | Racial and socioeconomic health disparities, medical sociology, chronic stress and allostatic load, autism spectrum disorders | Benevides, T., Carretta, H.J., & Graves, K.Y. (2019). Case Identification and Characterization of Autistic Young Adults in 2010 Medicare Fee-for-Service Claims. Autism in Adulthood, 1(3). | | | 1 | | 1 | | | | 1 | | | | | | | |
| Grubb s II | Ralph (Dean) | FSU Coastal & Marine Lab | Ichthyology and marine ecology with emphasis on the biology of exploited estuarine and marine fishes | Moore, A. B. M., & Grubbs, R. D. (2019). Shark and ray conservation research: Absent where the need is greatest. Aquatic Conservation: Marine and Freshwater Ecosystems, 29, 17. doi:DOI: 10.1002/aqc.3192 | | | | | | | | | | | 1 | | 1 | | | |
| Guthri e | Kathy | Educational Leadership and Policy Studies | Learning outcomes and environment of leadership and civic education, online teaching and learning, and professional development for Student Affairs Professionals | Acosta, A. A., & Guthrie, K. L. (2020). Haciendose un Líder: Leadership Identity Development of Latino Men at a Predominantly White Institution. Journal of Hispanic Higher Education. Retrieved from https://doi.org/10.1177%2F153819272093247 2 | | | | 1 | | | | | 1 | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------------|---------------|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Haim | Dotan | Political Science | Insurgency, Conflict, Social Networks, Southeast Asia | HAIM, D., RAVANILLA, N., & SEXTON, R. (2021). Sustained Government Engagement Improves Subsequent Pandemic Risk Reporting In Conflict Zones. American Political Science Review, 115(2), 717-724. doi:10.1017/S0003055420001148 | | | 1 | | | | | | | | | | | | | 1 | |
| Hall | Garret | School Psychology | Students' academic achievement, the roles of multi-tiered systems of support (MTSS) in promoting students' school success, and quantitative methods issues in school psychology research and practice | Borman, G. D., Choi, Y., & Hall, G. J. (2021). The impacts of a brief middle-school self- affirmation intervention help propel African American and Latino students through high school. Journal of Educational Psychology, 113(3), 605–620. https://doi.org/10.1037/edu0000570 | | | | 1 | | | | | | 1 | | | | | | | |
| Hallig an | Jessi | Anthropolog y | Peopling of the Americas, climate change during the terminal Pleistocene and early Holocene, coastal site preservation, and human adaptation to major climate change | Perrotti, A. G., Winsborough, B., Halligan, J. J., & Waters, M. (submitted). Reconstructing Late Quaternary Environmental Change at Page-Ladson, Florida Using Diatom and Palynological Evidence. Paleoamerica. Manuscript submitted for publication, 31 pages. | | | | | | | | | | | 1 | | 1 | 1 | | | |
| Hallin an | Daniel | Chemical & Biomedical Engineering | Structure and dynamics in nanostructured polymer materials, block copolymers, polymer-grafted nanoparticles, transport in polymer electrolytes, blend and composite electrolytes | Liu, H., Mulderrig, L., Hallinan, D., Chung, H., Lignin-Based Solid Polymer Electrolytes: Lignin-Graft-Poly(ethylene glycol). Macromol. Rapid Commun. 2021, 42, 2000428. https://doi.org/10.1002/marc.202000428 | | | | | | | | | 1 | | | | | | | | |
| Hanes sian | Holly | Art | 3D Digital Ceramics, Art and Science, Neuroscience and Art, Touch and Sensation, Sculptural Ceramics, Book Editions, Design and Craft | Hurricane Emergency Art Kit | | | | | | | 1 | | | | 1 | | | 1 | | | |
| Hanks | Lydia | Hospitality Administratio n | Consumer behavior, services marketing, and corporate social responsibility | Lydia Hanks, Lu Zhang & Sean McGinley (2020) The impact of temporal distance and need for status on employee evaluations of Corporate Social Responsibility campaigns, International Journal of Hospitality & Tourism Administration, 21:2, 188-204, DOI: 10.1080/15256480.2018.1464419 | | | | | | | | 1 | | | | 1 | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|---------------|---|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Hanso n | Ken | Chemistry & Biochemistry | Design, synthesis and characterization of light absorbing and emitting molecules; utility of these molecules in solar energy conversion | Arcidiacono, A.; Zhou, Y.; Zhang, W.; Ellison, J.O.; Ayad, S.; Knorr, E.S.; Peters, A.N.; Zheng, L.; Yang, W.; Saavedra, S.S.; Hanson, K. Examining the Influence of Bilayer Structure on Energy Transfer and Molecular Photon Upconversion in Metal Ion Linked Multilayers. J. Phys. Chem. C 2020, (ASAP). | | | | | | | 1 | | | | | | | | | | |
| Harrin gton | Julie | Center for Economic Forecasting and Analysis | Economic development, environmental, education, energy, real estate and high-tech economics | Vassiki Sanogo, Julie Harrington, Zafar Siddiqui, Information Sources, Awareness, and Perception Levels About Climate Change Impacts: A Case Study on Florida Stakeholders, International Journal of Economy, Energy and Environment. Vol. 3, No. 2, 2018, pp. 6-20. doi: 10.11648/j.ijeee.20180302.11 | 1 | | | 1 | | | 1 | 1 | 1 | | | | | | | | |
| Harris | Gregor y J | Family and Child Sciences | Food security in Latino adolescents and parents, perceived racial discrimination in African American families and individuals | Armstrong, J., Chavez, F., Jones, J., Harris, S., & Harris, G. J. (2019). A Dream Deferred: How Discrimination Impacts the American Dream for African Americans. Journal of Black Studies, 50 (3), 227-250. doi:https://doi.org/10.1177/002193471983333 0 | | 1 | | | | | | | | 1 | | | | | | | |
| Hart | Robert | Earth, Ocean & Atmospheric Science | Role of tropical cyclones in climate, including their memory, Hurricane intensity and structural change | Halperin, D.J., A. B. Penny, and R. Hart, 2020: A comparison of tropical cyclone genesis forecast verification from three Global Forecast System (GFS) operational configurations. Wea. Forec., 35, 5. | | | | | | | | | | | | | 1 | | | | |
| Hart | Sarah | Psychology | Individual differences of reading and math skills, focusing on genetic influences, the home environment, the school environment and cognitive correlates. Literacy and mathematics development, especially focusing on the relationships among component skills. The role of genetic effects on response to intervention. Intelligence. Methodology, particularly quantitative genetics | Little, C., Hart, S., Phillips, B. M., Schatschneider, C., & Taylor, J. (2019). Exploring neighborhood environmental influences on reading comprehension. Journal of Applied Developmental Psychology, 62, 173-184. | | | | 1 | | | | | | | 1 | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|------------------|-------------------|---|--|--|---|---|---|-----|---|---|---|---|----|----|----|----|----|----|----|----|
| Hauer | Mathe w | Sociology | Demography, climate change, population projections, environmental sociology, spatial analysis | Hauer, M.E., Fussell, E., Mueller, V. et al. Sea-level rise and human migration. Nat Rev Earth Environ 1, 28–39 (2020). https://doi.org/10.1038/s43017-019-0002-9 | | | | | | | | | 1 | | | 1 | | | | |
| Hawki ngs | Jon | Earth, Ocean & Atmospheric Science | Iron, phosphorus, nitrogen, silica and trace element (e.g. Mo, V, Mn) production, cycling and export from glacial environments | Hawkings, J.R., Linhoff, B.S., Wadham, J.L. et al. Large subglacial source of mercury from the southwestern margin of the Greenland Ice Sheet. Nat. Geosci. (2021). https://doi.org/10.1038/s41561-021-00753-w | | | | | | | | | | | | 1 | | | | |
| Hellstr om | Eric P | Mechanical Engineering | High-temperature superconductors; Electronic ceramics; Fuel cell | The Underlying Science for Realizing High Critical Current Density in (Ba/Sr)Fe2As2 Fe- based Superconductor Wires | | | | | | 1 | | | | | | | | | | |
| Hellw eg | Joseph | Religion | Religion, Islam, politics, performance, and health in West Africa | Rojas, A., West, C. T., Hellweg, J. R., McDaniel, P., & Moody, A. (2019). Environmental Change and the Cashew Sector: A Case Study in Manding-Speaking Côte d'Ivoire. Mande Studies, 21, 175-195. | | | | | | | | | | 1 | | 1 | | | | |
| Henne | Caroly n | Art | Sculpture | STAR: Sculpture, Marine Ecology and Commercial Fishing Collide (September 25, 2020) | | | | | | | | | | 1 | | | 1 | | | |
| Holley -Kline | Samue I | History | Late 19th and early 20th century Mexico, politics of cultural heritage, materiality, histories of archaeology, geospatial methodologies, and extractivism | Holley-Kline, S. (2020). Nationalist archaeology and foreign oil exploration in El Tajín, Mexico, 1935–1940. Archaeological Dialogues, 27(1), 79-93. doi:10.1017/S1380203820000100 | | | | | | | 1 | | 1 | | 1 | | | | | |
| Holme s | Christo pher D | Earth, Ocean & Atmospheric Science | Atmospheric chemistry, air pollution, greenhouse gasses, climate change, air quality, fires and smoke | Ronan, A. C., Ducker, J. A., Schnell, J. L., & Holmes, C. D. (2020). Have improvements in ozone air quality reduced ozone uptake into plants? Elem Sci Anth. Retrieved from https://doi.org/10.1525/elementa.399 doi:10.1525/elementa.399 | | | | | | | | | | | | 1 | | | | |
| Holme s | Tisha | Urban and Regional Planning | Climate change and adaptation strategies in coastal zones, promoting socio-ecological resilience in marginalized communities, planning in ecologically sensitive areas, community participation and engagement | Holmes, T., & Eisenman, D. (2019). Incremental advancements in public health adaptation to climate change in Florida. Cities and Health. doi:https://www.tandfonline.com/action/showC itFormats?doi=10.108 | | | 1 | | | | | | | | | 1 | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|---|--|---|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|
| Homa n | Patrici a | Sociology | Medical sociology, population health, gender, stratification/inequality, life course and aging, demography and quantitative methods | Marc A Garcia, PhD, Patricia A Homan, PhD, Catherine García, PhD, Tyson H Brown, PhD, The Color of COVID-19: Structural Racism and the Disproportionate Impact of the Pandemic on Older Black and Latinx Adults, The Journals of Gerontology: Series B, Volume 76, Issue 3, March 2021, Pages e75– e80, https://doi.org/10.1093/geronb/gbaa114 | | | 1 | | | | | | | 1 | | | | | | | |
| Horne r | Mark | Geography | Transportation, GIScience, urban geography, accessibility, spatial analysis | Onur Alisan, Mahyar Ghorbanzadeh, Mehmet Baran Ulak, Ayberk Kocatepe, Eren Ozguven, Mark Horner and Wenrui Huang. 2020. Extending Interdiction and Median Models to Identify Critical Hurricane Shelters. International Journal of Disaster Risk Reduction 43(101380). | | | | | | | | | | 1 | 1 | | | | | | |
| Hsu | Shi- Ling | Law | Carbon pricing, climate change risks and inequities | Hsu, Shi-Ling, Climate Triage: A Resources Trust to Address Inequality in a Climate- Changed World (February 28, 2019). Available at SSRN: https://ssrn.com/abstract=3348146 or http://dx.doi.org/10.2139/ssrn.3348146 | | | | | | | | | | 1 | | | 1 | | | | |
| Hu | Shoupi ng | Center for Postseconda ry Success | Postsecondary readiness, outcomes, and success | Brower, R.L., Nix, A.N., Daniels, H. et al. A Pedagogy of Preparation: Helping Underprepared Students Succeed in College- Level Coursework in Community Colleges. Innov High Educ 46, 153–170 (2021). https://doi.org/10.1007/s10755-020-09531-9 | | | | 1 | | | | | | | | | | | | | |
| Hu | Yan- yan | Chemistry & Biochemistry | Design, synthesis, and characterization of functional materials for energy storage and conversion; next-generation rechargeable lithium-ion batteries | Feng, X.; Chien, P.; Patel, S.; Zheng, J.; Immediato-Scuotto, M.; Xin, Y.; Hung, I.; Gan, Z.; Hu, YY. Synthesis and Characterizations of Highly Conductive and Stable Electrolyte Li10P3S12I. Energy Storage Mater. 2019, 22, 397-401. | | | | | | | 1 | | | | | 1 | 1 | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|---------------|---|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Huang | Wenrui | Civil & Environment al Engineering | Coastal & Estuarine Hydrodynamic Modeling, Surface Water Quality Modeling, Neural Network Applications in Hydrology, Hydraulic and Water Resource Engineering | Linoj Vijayan, Wenrui Huang, Kai Yin, Eren Ozguven, Simone Burns, Mahyar Ghorbanzadeh, 2021. Evaluation of Parametric Wind Models for More Accurate Modeling of Storm Surge: A Case Study of Hurricane Michael, Accepted for publication by the journal of Natural Hazards. DOI 10.1007/s11069-021-04525-y | | | | | | 1 | | | 1 | | | | | | | | |
| Huber | Amy | Interior Architecture and Design | Influence of interpersonal, interpretative, and presentational communication methods on the design process and its outcomes | Huber, A. M. (2020). Exploring the influence of user wellness in commercial interior design. In Yelena McLane, Ph.D., Jill Pable, Ph.D. (Ed.), AMPS 18.2: Experiential Design, Rethinking relations between people, objects and environment (pp. 97-111). Tallahassee, FL. Retrieved from http://architecturemps.com/wp- content/uploads/2020/12/AMPS-Proceedings- 18-2-Experiential-Design.pdf | | | 1 | | | | | | | | 1 | | | | | | |
| Huette I | Marku s H | Earth, Ocean & Atmospheric Science | Benthic ecology, ecology of coastal and shelf environments, oil spill research | Shin, B., Bociu, I., Kolton, M., Huettel, M., & Kostka, Joel, E. (2019). Succession of microbial populations and nitrogen-fixation associated with the biodegradation of sediment-oil-agglomerates buried in a Florida sandy beach. Scientific Reports, 9, 19401. Retrieved from https://www.nature.com/articles/s41598-019- 55625-6 doi:10.1038/s41598-019-55625-6 | | | | | | | | | | | | 1 | | 1 | | | |
| Hughe s | Roxan ne | NHMFL | Science identity for underrepresented minorities in STEM; science teaching; mentoring in STEM; informal STEM education | Hughes, Roxanne (PI). (Nov 2016–Aug 2019). Scigirls CONNECT2. Funded by Twin Cities Public Television, Inc. (21301-01- 03714). Total award \$150,052. | | | | 1 | | | | | | | | | | | | | |
| Huma yun | Munir | Earth, Ocean & Atmospheric Science | Geochemistry, Cosmochemistry, Meteoritics | FSU Professor Shines Light On 2035: MagLab scientist presents plan to fast-track transition to renewable energy | | | | | | | 1 | | 1 | | 1 | | | | | | |
| Ihlanf eldt | Keith | Economics | Urban and regional economics, local public finance, and labor economics | Ihlanfeldt, K. (2020). Vehicle miles traveled and the built environment: New evidence from panel data. Journal of Transport and Land Use, 13(1), 23-48. https://doi.org/10.5198/jtlu.2020.1647 | | | | | | | | | | 1 | 1 | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|-----------------------------------|---|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| Ingels | Jeroen | FSU Coastal & Marine Lab | Benthic biodiversity and ecology in the Anthropocene, with a focus on meiofauna and nematodes as ecological indicators of environmental change and pressures, involvement with the International Council for Exploration of the Seas (ICES) working group on deep-water ecology (WGDEC) | Lead author and co-author for chapters in the UN's World Ocean Assessment I and II, Biodiversity research as part of Environmental Impact Assessments in the framework of future deep-sea mining | | | | | | | | | | | | | 1 | | | |
| Inouy e | Brian | Biological Science | Spatial neighborhood effects on plants and insects, tritrophic interactions among plants- seed predators-parasitoids, mathematical models of communities, and phenological responses to climate change | Stemkovski, M., W.D. Pearse, S.R. Griffin, G.L. Pardee, J. Gibbs, T. Griswold, J.L. Neff, R. Oram, M.G. Rightmyer, C.S. Sheffield, K. Wright, B.D. Inouye, D.W. Inouye, R.E. Irwin 2020. Bee phenology is predicted by climatic variation and functional traits. Ecology Letters,doi: 10.1111/ele.13583. | | | | | | | | | | 1 | | 1 | | 1 | | |
| Isaac | Mark A | Economics | Factors Influencing Public Goods Provision, Auctions for Pollution Permits, Risk Aversion | R. Mark Isaac, Douglas A. Norton, and Svetlana Pevnitskaya, A New Experimental Mechanism To Investigate Polarized Demands For Public Goods: The Effects Of Censoring, Experimental Economics 22: 585- 609, 2019. | | | | | | | 1 | | | | 1 | | | | | |
| Jacks on | April | Urban and Regional Planning | Planning and implementation of large-scale projects with a focus on the built environment, mixed-income and choice neighborhood redevelopment efforts, new urbanism as a tool to revitalize urban communities, and planning for communities of color | Jackson, A., & Marques, M. (2019). DIY Do's and Don'ts: Limitations to Building University Partnerships with Low Resource Communities of Color. Planning Practice and Research, 40. | 1 | | | | | | | | 1 | 1 | | | | | | 1 |
| Jaffe | Aaron | English | Modernism; Modern and contemporary literature, culture, media | Aaron Jaffe (2020) Antihumanist modernism in biopolitical junkyards of controlled remediation and risk, Textual Practice, 34:9, 1519-1535, DOI: 10.1080/0950236X.2020.1808292 | | | | | | | | | | | 1 | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|---|---|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Johns on | Brad | Geography | Urban climate, land-atmosphere interactions, climate change, the intersection of weather and climate, Geospatial Information Systems, task automation using Python, and remote sensing applications | Shepherd J.M., Burian S.J., Jin M., Liu C., Johnson B. (2020) Two Decades of Urban Hydroclimatological Studies Have Yielded Discovery and Societal Benefits. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 69. Springer, Cham. https://doi.org/10.1007/978-3-030- 35798-6_29 | | | | | | | | | 1 | | 1 | | 1 | | | | |
| Johns on | Lisa | Social Work | Child advocacy and maltreatment, adoptive parent-child relationships, communication among multidisciplinary team members | Johnson, L., & Lance, J. (submitted). "Preparing a new generation to work in the area of child advocacy.". Paper submitted for presentation. | | | | | | | | | | | | | | | | 1 | |
| Jones | Kathry n | Biological Science | Symbiosis between nitrogen-fixing bacteria and legume plants, issue for farmers in the developing world | Sena-Velez, M., S. D. Holland, M. Aggarwal, N. G. Cogan, M. Jain, D. W. Gabriel, and K. M. Jones (2019) Growth dynamics and survival of Liberibacter crescens BT-1, an important model organism for the citrus Huanglongbing pathogen Candidatus Liberibacter asiaticus. Applied and Environmental Microbiology 85: e01656-19. | | 1 | | | | | | 1 | | | | | 1 | | 1 | | |
| Joos | Vincen t | Modern Languages & Linguistics | Post-disaster reconstruction and the relations between states, citizens, and international institutions and NGOs in the Caribbean | Joos, V. N. (2019, September). Gas shortages paralyze Haiti, triggering protests against failing economy and dysfunctional politics. The Conversation. Retrieved from https://theconversation.com/gas-shortages- paralyze-haiti-triggering-protests-against- failing-economy-and-dysfunctional-politics- 116337 | | | | | | | | 1 | | | | | | | | 1 | |
| Jung | Sungm oon | Civil & Environment al Engineering | Wind Effects on Structures, Hurricane & Community Resilience, Wind Energy, Vehicle Design & Safety | Martin, S., Jung, S., & Vanli, O. A. (2020), Impact of near-future turbine technology on the wind power potential of low wind regions, Applied Energy, 272, 115251 [DOI] | | | | | | | 1 | | 1 | | 1 | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|--|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Justus | Jack | Philosophy | AOS: Philosophy of Science (esp. biology), History of Analytic Philosophy, Environmental Philosophy AOC: Formal Epistemology, Logic and Philosophy of Mathematics, Metaphilosophy, Environmental Ethics. | Saltz, D., Justus, J. R., & Huffaker, B. (2019). The Crucial But Underrepresented Role of Philosophy in Conservation Biology Curricula. Conservation Biology, 33, 217-220. Retrieved from https://conbio.onlinelibrary.wiley.com/doi/abs/ 10.1111/cobi.13162?af=R doi:10.1111/cobi.13162 | | | | | | | | | | | | | | | 1 | | |
| Kalbia n | Aline | Religion | The way moral traditions develop and change over time, especially on matters pertaining to gender, sexuality, and medicine | Kalbian, A. H., Campbell, C., & Childress, J. F. (2020). "Community, Complicity, and Critique: Christian Concepts in Secular Bioethics". American Journal of Bioethics, 20(12), 37-39. doi:10.1080/15265161.2020.1833097 | | | 1 | | | | | | | 1 | 1 | | | | | | |
| Kalu | Egwu | Chemical & Biomedical Engineering | Electrochemical & Nanomaterials Engineering for Sustainable Energy and Environmental Systems, Electrical Energy Storage Modeling - Batteries, Ultracapacitors and Fuel Cells, Oxygen electrocatalysis (fuel cells), catalysis for Hydrogen generation from liquid fuels and biofuels | Uloma Onyeka, Desmond Ukaero, Egwu Kalu, Potential Health Threat Due To Migration of Lead And Aluminum into Food Cooked with Recycled Metal And Alloy Pots, Current Developments in Nutrition, Volume 4, Issue Supplement_2, June 2020, Page 769, https://doi.org/10.1093/cdn/nzaa052_038 | | 1 | 1 | | | | 1 | | | | | | | | | | |
| Kamp mann | Rapha el | Civil & Environment al Engineering | Multi-axial failure behavior of concrete, Construction materials, Destructive test methods | FSU GAP awards help faculty commercialize inventions | | | | | | | | | 1 | | | | | | | | |
| Kenne mur | Justin | Chemistry & Biochemistry | Sustainable polymers, precision polymers, block polymer self assembly | Mark R. Yarolimek, Heather R. Bookbinder, Brianna M. Coia, and Justin G. Kennemur, ACS Macro Letters 2021 10 (6), 760-766, DOI: 10.1021/acsmacrolett.1c00284 | | | | | | | 1 | | | | | 1 | 1 | | | | |
| Khurs hid | Ayesh a | Educational Leadership and Policy Studies | International development and educational policymaking and implementation, globalization and transnationalism, and gender and education | Khurshid, A., & Shah, P. (in press). Islam, Culture, and Education: Narratives of Gendered Modernity and Empowerment from Pakistan and India. Gender and Education, 30 pages. | | | | 1 | 1 | | | | | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|----------------|---|--|---|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| Kim | Amy | Sport Managemen t | Effectiveness of sport participation on individual's social, psychological, and mental health outcomes from a social epidemiological perspective; evidence-based interventions to promote sport participation and participants' health and well-being | Amy Chan Hyung Kim, Joshua I. Newman & Woong Kwon (2020) Developing community structure on the sidelines: A social network analysis of youth sport league parents, The Social Science Journal, 57:2, 178-194, DOI: 10.1016/j.soscij.2018.11.011 | | | | | | | | | | 1 | | | | | | |
| Kim | Eunde ok | Jim Moran College of Entrepreneu rship | The Contribution of Social Enterprises to Advancing the UN Sustainable Development Goals | Kim, E. (under review). Sustainable new product development: A problem-based service learning project with Ten Thousand Villages, a social enterprise. Sustainability. | | | | | | | | | | | 1 | | | | | |
| Kim | Minjee | Urban and Regional Planning | Relationship between real estate development and urban planning, how planners and policymakers can harness the forces of real estate development to further progressive planning values and encourage equitable development outcomes | Kim, Minjee. 2021. "How Do Tax-Based Revitalisation Policies Affect Urban Property Development? Evidence from Bronzeville, Chicago." Urban Studies, March, 0042098021995148. https://doi.org/10.1177/0042098021995148. | | | | | | | | 1 | | 1 | | | | | | |
| Kim | Young- An | Criminology & Criminal Justice | Neighborhoods and Crime Criminology of Place Spatial Analysis Quantitative Research Methods | James C Wo, Young-An Kim, A Longitudinal Examination of Building Demolitions on Neighbourhood Crime Rates, The British Journal of Criminology, Volume 61, Issue 3, May 2021, Pages 710–732, https://doi.org/10.1093/bjc/azaa077 | | | | | | | | | | 1 | | | | | | |
| Kitche ns | Carl | Economics | Economics, privately owned or government owned utilities, prices to consumers, labor market | The Impact of the WWI Agricultural Boom and Bust on Female Opportunity Cost and Fertility. Carl T. Kitchens and Luke P. Rodgers. NBER Working Paper No. 27530. | | | | | 1 | | | 1 | | | | | | | | |
| Knapp | Angela Noel | Earth, Ocean & Atmospheric Science | Nitrogen cycling, marine biogeochemistry, isotope geochemistry, nitrogen fixation | *Howe, S., *Miranda, C., Hayes, C., Letscher, R., & Knapp, A. N. (2020). The dual isotopic composition of nitrate in the Gulf of Mexico and Florida Straits. Journal of Geophysical Research - Oceans, 34. Retrieved from https://agupubs.onlinelibrary.wiley.com/doi/ab s/10.1029/2020JC016047 | | | | | | | | | | | | 1 | 1 | | | |
| Knight | Amy | FNAI | Florida Cooperative Land Cover Map, the Florida Longleaf Pine Ecosystem Geodatabase, and web map development | Knight, A., & Kindell, C. (2019). Southeast Longleaf Ecosystem Occurrences (LEO) Database. The Longleaf Leader, 11(4), 29-30. | | | | | | | | | | | | | | 1 | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------------|-----------------------|---|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Kranz | Sven Alexan der | Earth, Ocean & Atmospheric Science | Phytoplankton ecology, Antarctic and tropical oceanic primary production, photosynthesis, nutrient acquisition by phytoplankton, N2 fixation by cyanobacteria | Ingles, J., Aronson, R., Smith, C., Baco- Taylor, A., Bik, H., Blake, J., Brandt, A., Cape, M., Demaster, D., Dolan, E., Domack, E., Fire, S., Geisz, H., Gigliotti, M., Griffiths, H., Halanych, K., Havermans, C., Huettemann, F., Kranz, S. A., & and others. (2021). Antarctic Ecosystem Responses following Ice Shelf Collapse and Iceberg Calving: Science Review and Future Research. Frontiers in Marine Science. Retrieved from https://onlinelibrary.wiley.com/doi/10.1002/wc c.682 doi:doi/10.1002/wcc.682 | | | | | | | | | | | | | 1 | 1 | | | |
| Landa u | David E. | Law | Socioeconomic rights, future of social and economic rights | Landau, David, Socioeconomic Rights in Latin America: Closing the Gap Between Aspiration and Reality (2020). COLLECTED COURSES OF THE ACADEMY OF EUROPEAN LAW: HUMAN RIGHTS AND DISTRIBUTIVE JUSTICE (Oxford University Press, forthcoming), Available at SSRN: https://ssrn.com/abstract=3569352 | 1 | | | | | | | | | | | | | | | | |
| Landi ng | William M | Earth, Ocean & Atmospheric Science | Biogeochemistry of trace elements in the atmosphere and oceans | Wurl, O., Landing, W. M., Mustaffa, N. I. H., Ribas-Ribas, M., Witte, C. R., & Zappa, C. J. (2019). The Ocean's Skin Layer in the Tropics. Journal of Geophysical Research- Oceans, 124(1), 59-74. Retrieved from http://apps.isiknowledge.com/InboundService. do?Func=Frame&product=WOS&action=retri eve&SrcApp=EndNote&Init=Yes&SrcAuth=Re searchSoft&mode=FullRecord&UT=WOS:000 458718600004 doi:10.1029/2018jc014021 | | | | | | | | | | | | | 1 | 1 | | | |
| Lattur ner | Susan | Chemistry & Biochemistry | Environment and Energy, Radiochemistry. Solid State Chemistry | Hertz, M. B.; Baumbach, R.E.; Latturner, S.E. Flux Synthesis of MgNi2Bi4 and Its Structural Relationship to NiBi3. Inorg. Chem. 2020, in press. | | | | | | | 1 | | | | | 1 | 1 | | | | |
| Lee | Jaejin | Communicat ion | Corporate Social Responsibility, Advocacy Advertising, Green Consumerism | Olivia Stacie-Ann C. Bravo & Jaejin Lee (2020) The mediating effects of message agreement on millennials' response to advocacy advertising, Journal of Marketing Communications, 26:8, 856-873, DOI: 10.1080/13527266.2019.1596969 | | | | | | | | 1 | | | | | 1 | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|-------------------------|---|--|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| Lemm on | Alan R | Scientific Computing | Biogeography, molecular phylogenetics and evolution | Carla Hurt, Kristin Hultgren, Arthur Anker, Alan R. Lemmon, Emily Moriarty Lemmon, Heather Bracken-Grissom, First worldwide molecular phylogeny of the morphologically and ecologically hyperdiversified snapping shrimp genus Alpheus (Malacostraca: Decapoda), Molecular Phylogenetics and Evolution, Volume 158, 2021, 107080, ISSN 1055-7903, https://doi.org/10.1016/j.ympev.2021.107080. (https://www.sciencedirect.com/science/article /pii/S1055790321000130) | | | | | | | | | | | | | 1 | | | |
| Leppa rd | Tom | Anthropolog y | Global transition from small-scale and non- urban to large-scale, hierarchical societies, Holocene Afro-Eurasia | Athens, J. Stephen and Thomas P. Leppard. 2019. Settlement and subsistence in the remote western Pacific: archaeological and radiocarbon data from Alamagan, Northern Mariana Islands. Journal of Field Archaeology 44(2):109-125. | | 1 | 1 | | | | | | | 1 | | | | | | |
| Lester | Sarah | Geography | Marine conservation and protected areas, natural resource management and policy, marine spatial planning/ocean zoning, sustainable seafood, fisheries assessment and management, biogeography and macroecology | McHenry, J, Welch, H, Lester, SE, Saba, V. Projecting marine species range shifts from only temperature can mask climate vulnerability. Glob Change Biol. 2019; 25: 4208–4221. https://doi.org/10.1111/gcb.14828 | | | | | | | | 1 | | | | 1 | 1 | | | |
| Levita n | Don | Biological Science | Ecology and evolution of marine invertebrates, Animal Behavior, Conservation Biology | 2019 Levitan, D.R., R. Buchwalter and Y. Hao. The Evolution of gametic compatibility and compatibility groups in the sea urchin Mesocentrotus franciscanus: an avenue for speciation in the sea. Evolution 73:1428- 1442 | | | | | | | | | | | | 1 | 1 | | | |
| Li | Amy | Social Work | Cultural diversity and health care disparity, mental health, traumatic life experiences, chronic conditions, aging, health and well- being and post-traumatic stress disorders and growth | Amy L. Ai & Jungup Lee (2021) Understanding a mechanism between perceived discrimination and obesity among Latinas in the United States, Ethnicity & Health, 26:4, 471-486, DOI: 10.1080/13557858.2018.1530737 | | | 1 | | | | | | 1 | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | B |) 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------------|--------------------|---|---|---|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|
| Li | Hui (Helen) | Electrical & Computer Engineering | Bi-directional dc-dc converters, Micro-grid inverter control, Cascaded multilevel inverter, Advanced digital control technique and renewable energy generation | Liu, L., & Li, H., "Decoupled Active and Reactive Power Control for Large Scale Grid- Connected Photovoltaic Systems Using Cascaded Modular Multilevel Converters," IEEE Transaction in Power Electronics (in press). | | | | | | | 1 | 1 | | | | | | | | | |
| Li | Yuan | Electrical & Computer Engineering | Impedance source converter, DC-DC converter, DC-AC inverter, photovoltaic power generation forecasting, power electronics interfacing power systems | Resilient Energy Delivery and Control System. (2020–2023). Funded by Department of Energy. Total award \$5,200,000. | | | | | | | 1 | 1 | I | | | | | | | | |
| Liu | Guosh eng | Earth, Ocean & Atmospheric Science | Radiative transfer, Satellite remote sensing and applications to forecasting and climate research | Kuo, Chia-Pang, Yang, P., Huang, X., Chen, Yi-Hsuan, & Liu, G. (2019). Assessing the accuracy and efficiency of longwave radiative transfer models involving scattering effect with cloud optical property parameterizations. J. Quant. Spectrosc. Radiat. Transf, 240. doi:10.1016/J.JQSRT.2019.106683 | | | | | | | | | | | | | 1 | | | | |
| Locke | Bruce | Chemical & Biomedical Engineering | Plasma reaction engineering; metabolic engineering in muscle | S. Mededovic-Thagard and B.R. Locke, Electrical Discharge Plasma for Water Treatment, Chapter 12, in Advanced Oxidation Processes for Water Treatment: Fundamentals and Applications, M. I. Stefan (ed.), IWA Publishing, London, UK, 9/15/2017. ISBN13: 9781780407180, eISBN: 9781780407197, pp. 493-534. | | | | | | | | | | | | | | 1 | | | |
| Ма | Biwu | Chemistry & Biochemistry | Environment and Energy, Nanoscience, Spectroscopy and Photochemistry, Solid State Chemistry | Qingquan He et al. Highly Efficient and Stable Perovskite Solar Cells Enabled by Low-Cost Industrial Organic Pigment Coating, Angewandte Chemie International Edition (2020). DOI: 10.1002/anie.202012095 | | | 1 | | | | 1 | | | | | 1 | 1 | | | | |
| MacD onald | lan R | Earth, Ocean & Atmospheric Science | Deep ocean extreme communities, estimating offshore oil seeps | MacDonald, I., Gaytan-Caballero, A., & Escobar-Briones, E. (in press). Chapter 8; The Asphalt Ecosystem of the Southern Gulf of Mexico: Abyssal Habitats Across Space and Time. In Murowski, S. (Ed.), Scenarios and Responses to Future Deep Oil Spills. Springer -Nature. | | | | | | | | | | | | 1 | | 1 | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------------------------|---------------|---|---|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| Madh usuda n Mehta | Jayur | Anthropolog y | North American Native Americans, human- environment relationships, and the consequences of French and Spanish colonization in the Gulf South | Jayur Madhusudan Mehta & Elizabeth L. Chamberlain (2019) Mound Construction and Site Selection in the Lafourche Subdelta of the Mississippi River Delta, Louisiana, USA, The Journal of Island and Coastal Archaeology, 14:4, 453-478, DOI: 10.1080/15564894.2018.1458764 | | | | | | | | | | | | | | 1 | | |
| Manc hiraju | Srikant | Jim Moran College of Entrepreneu rship | Attitudes and Beliefs; Culture and Ethnicity; Emotion, Mood, Affect; Evolution and Genetics; Internet and Virtual Psychology; Life Satisfaction, Well-Being; Personality, Individual Differences; Research Methods, Assessment | Arpita Khare, Amrut Sadachar & Srikant Manchiraju (2020) Investigating the Role of Knowledge, Materialism, Product Availability, and Involvement in Predicting the Organic Clothing Purchase Behavior of Consumers in the Indian Market, Journal of International Consumer Marketing, 32:3, 228-242, DOI: 10.1080/08961530.2019.1695239 | | | | | | | | | | | 1 | | | | | |
| Mardi s | Marcia A. | Information | Learning resources, digital libraries, natural disaster response | Ghorbanzadeh, M., Ozguven, E. E., Tenney, C. S., Leonarczyk, Z., Jones, F. R., & Mardis, M. A. (2020). Natural disaster accessibility of small and rural libraries in Northwest Florida. Public Libraries Quarterly. doi:10.13140/RG.2.2.35092.45440 | | | | | | | | | 1 | 1 | | 1 | | | | |
| Marsh all | Alan R | Chemistry & Biochemistry | Environmental applications of Fourier transform ion cyclotron resonance mass spectrometry in crude oil and biofuels | He, L.; Rockwood, A. L.; Agarwal, A. M.; Anderson, L. C.; Weisbrod, C. R.; Hendrickson, C. L.; Marshall, A. G. Diagnosis of Hemoglobinopathy and beta-Thalassemia by 21 Tesla Fourier Transform Ion Cyclotron Resonance Mass Spectrometry and Tandem Mass Spectrometry of Hemoglobin from Blood. Clinical Chem. 2019, 65, 986-994. | | | | | | | 1 | | | | 1 | 1 | | | | |
| Martin | Sean | Civil & Environment al Engineering | Structural Engineering; Wind Engineering; Wind Energy | Martin, S., Sungmoon Jung and Arda Vanli. "Impact of near-future turbine technology on the wind power potential of low wind regions." Applied Energy 272 (2020): 115251. | | | | | | | 1 | | 1 | | | | | | | |
| Marze n | Chad | Risk Managemen t and Insurance | Insurance law, tort law, crop insurance | Marzen, C. (2018). The Pollution Exclusion and Carbon Monoxide. North Dakota Law Review (University of North Dakota School of Law), 93(2), 219-242. | | | | | | | | | | | 1 | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|---|---|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| Masla ch | David | Managemen t | Organizational Learning, Innovation of Advanced Technologies, Technological Failure, Sharing Economy | David Maslach, Richard Devine, and Robert Michael Holmes, 2020: Motives in the Sharing Economy: Evidence from Field Experiments on a New Online Task Platform. Proceedings, 2020, https://doi.org/10.5465/AMBPP.2020.13449ab stract | | | | | | | 1 | 1 | | | | | | | | |
| Maso n | Olivia | Earth, Ocean & Atmospheric Science | Marine microbial ecology, responses of uncultivated seafloor bacteria after Deepwater Horizon oil spill | Wang, J., Coles, V., Stukel, M. R., & Mason, O. U. (presented 2020, February). Rapid Adaption of the Microbial Community to Abrupt Environmental Change in the Gulf of Mexico Modeled with the Genome-based EmergeNt Ocean Microbial Ecosystem Model. Presentation at OSM, AGU, San Diego. (International) | | | | | | | | | | | 1 | 1 | 1 | | | |
| Maso n | Patrick | Economics | Social sustainability, African American studies | Mason, P. L. (in press). African Americans and the Political Economy of Race: individualist and stratification perspectives on persistent inequality. Chapel Hill, North Carolina: The University of North Carolina Press. | | | | | | | 1 | | 1 | | | | | | | |
| Mast | Austin | Biological Science | Biodiversity study, interplay of ecology and evolution, historical biogeography | Pearson, K., & Mast, A. (2019). Mobilizing the biodiversity specimen collection community for effective outlier detection and documentation in the Anthropocene. American Journal of Botany, 106, 1052–8. Retrieved from https://bsapubs.onlinelibrary.wiley.com/doi/pdf /10.1002/ajb2.1335 doi:doi:10.1002/ajb2.1335 | | | | | | | | | | | | 1 | | 1 | | |
| Mathi as | John | Social Work | Community organizing and social change; civic engagement and civil society; social movements; environmental social work | Powers, M. C. F., Willet, J., Mathias, J., & Hayward, A. (forthcoming) Green Social Work for Environmental Justice: Implications for International Social Workers. In Dominelli, L., Hok Bun, K. U., & Nikku, B. J. (Eds.) The Green Social Work Reader. | | | | | | | | | | | | 1 | | 1 | 1 | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|---------------|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Matto ussi | Hedi | Chemistry & Biochemistry | Bioanalytical, Chemical Biology, Environment and Energy, Structural Biology, Spectroscopy and Photochemistry | S. Wang, L. Du, Z. Jin, Y. Xin, and H. Mattoussi, "Enhanced Stabilization and Easy Phase Transfer of CsPbBr3 Perovskite Quantum Dots Promoted by High Affinity Polyzwitterionic Ligands," J. Am. Chem. Soc. 2020,142, 12669-12680 DOI: 10.1021/jacs.0c03682 | | | | | | | 1 | | | | | 1 | 1 | | | | |
| McCo y | Sophie J. | Biological Science | Macroalgal populations, intertidal communities, and links between biology, environmental conditions and water chemistry | Cissell, EC, JC Manning and SJ McCoy (2019) Consumption of proliferating cyanobacterial mats on Caribbean reefs. Scientific Reports, 9:12693. | | | | | | | | | | | | | 1 | 1 | 1 | | |
| McCre ary | Tyler | Geography | Geographies of race and indigeneity, geographies of science and technology, legal geographies, labor geographies, environmental justice, political ecology, critical infrastructure studies | Wright, Willie Jamaal, Tyler McCreary, Brian Williams, & Adam Bledsoe. 2020. Race, Land, and the Law: Black Farmers and the Limits of a Politics of Recognition. In Ashanté M. Reese & Hanna Garth (eds.), Black Food Matters: Racial Justice in the Wake of Food Justice, 228-250. University of Minnesota Press. | | | | | | | | | | 1 | | | 1 | | | 1 | |
| McCul lough | Kathle en | Risk Managemen t and Insurance | State and local policy, catastrophe mitigation | Gatzlaff, D. H., McCullough, K., Medders, L., Nyce, C. (2018). The Impact of Hurricane Mitigation and Inspection Information on House Prices. Journal of Real Estate Finance and Economics | | | | | | | | | | | 1 | | 1 | | | | |
| McFar land | Michae I | Sociology | Health Disparities, Biodemography, Mental Health | McFarland, M. J., & Allen, K. (2020). How are income and education related to the prevention and management of diabetes. Journal of Aging and Health. | | | 1 | 1 | | | | 1 | | | | | | | | | |
| McGin ley | Sean | Hospitality Administratio n | Organizational Behavior, Career Management, Qualitative Research Methods, Protean Careers | Kim, W., McGinley, S., Choi, H., & Agmapisarn, C. (submitted). Hotels' environmental leadership and employees' organizational citizenship behavior. International Journal of Hospitality Management. Manuscript submitted for publication, 32 pages. | | | | | | | | 1 | | | | 1 | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3 9 | 10 |) | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|----------------|--|---|---|---|---|---|---|---|---|---|-----|----|----------|----|----|----|----|----|----|----|
| McKe nna | Amy | NHMFL | Ddvanced analytical characterization of complex organic mixtures by ultrahigh resolution FT-ICR mass spectrometry; heavy petroleum, dissolved organic and soil organic matter, environmental samples (e.g., wastewater and byproducts) and halogenated compounds | McKenna, A.M. et al. (2021, Nov 11). Expanding the Analytical Window for Biochar Speciation: Molecular Comparison of Solvent Extraction and Water-Soluble Fractions of Biochar by FT-IRC Mass Spectrometry. Anal. Chem. 2021, 93, 46, 15365–15372. https://doi.org/10.1021/acs.analchem.1c0305 8. | | | | | | | | | | | | 1 | | | | | |
| McLa ne | Yelena | Interior Architecture and Design | Interior spatial analysis and design history, homelessness and supportive housing | Pable, J., McLane, Y., & Trujillo, L. (2021). Homelessness and the Built Environment: Designing for Unhoused Persons. Routledge. | 1 | | | | | | | | | | 1 | | | | | | |
| Mend e | Martin Alan | Marketing | Consumer Attachments to Service Firms and Service Employees, Conspicuous Consumption, Complaint Management and Service Recovery | Mende, Martin, Linda Salisbury, Gergana Nenkov, and Maura L. Scott (2020), "Improving Financial Inclusion through Communal Financial Orientation: How Financial Service Providers Can Better Engage Consumers in Banking Deserts," Journal of Consumer Psychology, 30 (2), 379- 391 (FT 50). | | | | | | | | 1 | | | | | | | | | |
| Merric k | David | Florida Public Affairs Center | Unmanned Systems in Emergency Management, Remote Sensing in Disasters, Information Systems, Social Media in Disasters, Logistics, Disaster Planning | Merrick, David (PI). (Oct 2017–Sep 2018). RAPID: Collaborative Research: Unmanned Aerial System Datasets from Hurricanes Harvey and Irma. Funded by National Science Foundation. (1762139). Total award \$11,740. | | | | | | | | 1 | | | 1 | | 1 | | | | |
| Merric k | Trina | Geography | Remote sensing, spectroscopy from satellites and unmanned aerial systems (UAS), solar- induced fluorescence and gross primary production, other vegetation health indices, tropical vegetation, interdisciplinary collaborations to answer ecological questions about vegetation in the tropics | Trina Merrick, Maria Luisa S.P. Jorge, Thiago S. F. Silva, Stephanie Pau, John Rausch, Eben N. Broadbent & Ralf Bennartz (2020) Characterization of chlorophyll fluorescence, absorbed photosynthetically active radiation, and reflectance-based vegetation index spectroradiometer measurements, International Journal of Remote Sensing, 41:17, 6755-6782, DOI: 10.1080/01431161.2020.1750731 | | | | | | | | | | | | | 1 | | 1 | | |
| Mesev | Victor | Geography | GIS/remote sensing, urban image classification, disaggregate cartography, conflict mapping, geography of sport | Strode, G., Mesev, V., Bleisch, S., Ziewitz, K., Reed, F., & Morgan, J. D. (2020). Exploratory Bivariate and Multivariate Geovisualizations of a Social Vulnerability Index. Cartographic Perspectives, (95), 5-23. https://doi.org/10.14714/CP95.1569 | | | | | | | | | 1 | | 1 | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------------|----------------|---|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Meyer | Alexan dria | Psychology | Natural disasters, childhood anxiety after traumatic events | Kessel, E. M., Nelson, B. D., Finsaas, M., Kujawa, A., Meyer, A., Bromet, E., Carlson, G. A., Hajcak, G., Kotov, R., & Klein, D. N. (2019). Parenting style moderates the effects of exposure to natural disaster-related stress on the neural development of reactivity to threat and reward in children. Development and psychopathology, 1-10. doi:https://doi.org/10.1017/S09545794180013 47 | | | 1 | | | | | | | | | | 1 | | | | |
| Mick | Megha n | Interior Architecture and Design | Biophilic Design, Environmental Graphics, Design to cultivate the connection between people and place for improved well-being and quality of life | First Year Assistant Professor grant from FSU's Council on Research and Creativity for summer project "Inside Out: Assessing and Designing Outdoor Spaces for Teaching and Learning in a Campus Environment" | | | 1 | 1 | | | | | | | 1 | 1 | | | | | |
| Millen der | Eugeni a | Center for Indigenous Nursing Research for Health Equity | Increasing access to mental health equity, providing culturally appropriate care, health disparities among indigenous and vulnerable populations that is the result of stress and trauma | Wimbish-Cirilo R, Lowe J, Millender E, Orellana ER. Addressing Substance Use Utilizing a Community-Based Program among Urban Native American Youth Living in Florida. Genealogy. 2020; 4(3):79. https://doi.org/10.3390/genealogy4030079 | | | 1 | | 1 | | | | | 1 | 1 | | | | | | |
| Miller | Thoma s E | Biological Science | Coastal dune vegetation, evolution of protozoa in pitcher plants | Green, M. D., and T. E. Miller. 2019. Germination traits explain deterministic processes in the assembly of early successional coastal dune vegetation. Estuaries and Coasts 42:1097-1103. doi:https://doi.org/10.1007/s12237-019-00550 | | | | | | | | | | | | | 1 | 1 | | | |
| Miron | Philipp e | COAPS | Lagrangian analysis of physical oceanography phenomena using nonlinear dynamics techniques | Miron, P., Beron-Vera, F.J., Helfmann, L. and Koltai, P. (2021). Transition paths of marine debris and the stability of the garbage patches. Chaos, 31. https://doi.org/10.1063/5.0030535. | | | | | | | | | | | | | | 1 | | | |
| Mishr a | Akhiles h | COAPS | Numerical modeling of weather and climate, ocean modeling, season predictability and climate variability | Vasubandhu Misra, Akhilesh Mishra, Amit Bhardwaj, A coupled ocean-atmosphere downscaled climate projection for the peninsular Florida region, Journal of Marine Systems, Volume 194, 2019, Pages 25-40, ISSN 0924-7963, https://doi.org/10.1016/j.jmarsys.2019.02.010. | | | | | | | | | | | | | 1 | 1 | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|----------------|--|---|---|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|
| Misra | Vasub andhu | Earth, Ocean & Atmospheric Science | Climate variability and predictability, kinetic energy of tropical cyclones in global ocean surface wind | Misra, V., Irani, T., Staal, L., Morris, K., Asefa, T., Martinez, C., & Wendy, G. (in press). The Florida Water and Climate Alliance (FloridaWCA): Developing a stakeholder- scientist partnership to create actionable science in climate adaptation and water resource management. Bull. Amer. Soc, 44 pages. | | | | | | 1 | | | | | | | 1 | 1 | | | 1 |
| Mokh er | Christi ne | Educational Leadership and Policy Studies | State and local policies focused on college- and career-readiness and success, with a particular emphasis on student transitions from secondary to postsecondary education | Mokher, C. G., Park-Gaghan, T. J., & Hu, S. (2021). What happens to efficiency and equity? The cost implications of developmental education reform. Research in Higher Education, 62, 151–174. Retrieved from https://rdcu.be/ce8KV doi:10.1007/s11162-020-09593-w | | | | 1 | | | | | | 1 | | | | | | | |
| Mook herjee | Mainak | Earth, Ocean & Atmospheric Science | Elasticity and transport properties of minerals, Structure, and properties of aqueous fluids and melts at high-pressures and temperature, Crust, mantle, core, and subduction zone settings | Man Xu, Zhicheng Jing, Suraj K. Bajgain, Mainak Mookherjee, James A. Van Orman, Tony Yu, Yanbin Wang. High-pressure elastic properties of dolomite melt supporting carbonate-induced melting in deep upper mantle. Proceedings of the National Academy of Sciences Aug 2020, 117 (31) 18285-18291; DOI: 10.1073/pnas.2004347117 | | | | | | | | | | | | | | 1 | | | |
| Moon | Jinyeo ng | Electrical & Computer Engineering | Modeling, design, analysis, and measurement of circuits and systems in the fields of power conversion, energy harvesting, electromagnetics, and renewable energy | Moon, J. High-frequency capacitive wireless power transfer technologies. J. Power Electron. (2021). https://doi.org/10.1007/s43236-021-00262-4 | | | | | | | 1 | | | | | | | | | | |
| Morey | Steve | COAPS | Shelf processes including coastal upwelling and estuarine connectivity, circulation in the Gulf of Mexico, and the interaction between physical processes and marine ecosystems | Morey, S.L., G. Gopalakrishnan, E. Pallás Sanz, J.M.A. Correia De Souza, K. Donohue, P. PérezBrunius, D. Dukhovskoy, E. Chassignet, B. Cornuelle, A. Bower, H. Furey, P. Hamilton, J. Candela (2020). Assessment of numerical simulations of deep circulation and variability in the Gulf of Mexico using recent observations. J. Phys. Oceanogr., doi:10.1175/JPO-D-19-0137.1. | | | | | | | | | | | | | | 1 | 1 | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------------|---------------|---|--|--|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|
| Morto n | Peter S | Earth, Ocean & Atmospheric Science | Chemical Oceanography | Enhanced trace element mobilization by Earth's ice sheets. Jon R. Hawkings, Mark L. Skidmore, Jemma L. Wadham, John C. Priscu, Peter L. Morton, Jade E. Hatton, Christopher B. Gardner, Tyler J. Kohler, Marek Stibal, Elizabeth A. Bagshaw, August Steigmeyer, Joel Barker, John E. Dore, W. Berry Lyons, Martyn Tranter, Robert G. M. Spencer, the SALSA Science Team. Proceedings of the National Academy of Sciences Dec 2020, 117 (50) 31648-31659; DOI: 10.1073/pnas.2014378117 | | | | | | | | | | | | | 1 | 1 | | | |
| Murph y | Elizab eth | Classics | Modern theory approach applied to archaeology | Landscape Archaeology of Southwest Sardinia Project (Italy) https://landscapearchaeologyofsouthwestsard inia.wordpress.com/ | | | | | | | | | | | | | | | 1 | | |
| Newm an | Joshua | Sport Managemen t | Cultural Politics of Sport; Identity Politics in Sport; Political Economy of Sport; Qualitative Inquiry; Sociology of Sport Science; Sport, Development, and Globalization. | McLeod, C. M., Pu, H., & Newman, J. (2018). Blue skies over Beijing: Olympics, environments, and the People's Republic of China. Sociology of Sport Journal, 35(1), 29- 38. | | | | | | | | | | | | | 1 | | | | |
| Nichol son | Sharon | Earth, Ocean & Atmospheric Science | Tropical meteorology | Nicholson, S. E., 2018: A multi-century history of drought and wetter conditions in Africa. Palgrave Handbook of Climate History (C. Pfister, ed.), Palgrave MacMillan, London, 225-236. | | | | | | | | | | | | | 1 | | | | |
| Nieku s | Martijn | Center for Economic Forecasting and Analysis | Economics of clean energy and research commercialization | Takatsuka, Yuki & Niekus, Martijn & Harrington, Julie & Feng, Shuang & Watkins, David & Mirchi, Ali & Nguyen, Huong & Sukop, Michael. (2018). Value of irrigation water usage in South Florida agriculture. The Science of the total environment. 626. 486- 496. 10.1016/j.scitotenv.2017.12.240. | | | | | | | | 1 | 1 | | | | | | | | |
| Nienh aus | Lea | Chemistry & Biochemistry | Environment and Energy, Nanoscience, Photochemistry and spectroscopy, Synthesis and Catalysis | Wieghold, S.; Nienhaus, L., Precharging Photon Upconversion: Interfacial Interactions in Solution-Processed Perovskite Upconversion Devices. J. Phys. Chem. Lett. 2019, 11, 601-607. | | | 1 | | | | 1 | | | | | 1 | 1 | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------------|---------------|---|---|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Noel | La Tonya | Social Work | Trauma impacts on academic outcomes and experiences of BIPOCs, cultural diversity, culturally competent practice, health disparities, healthcare, medical social work, race/ethnicity | Mental Health Symptoms Post Traumatic Disasters Among Black and White Volunteers: An Exploration of Predictor and Protective Factors | | | 1 | | | | | | | 1 | | | | | | | |
| Nowa kowsk i | Xan | Behavioral Science & Social Medicine | Healthy and equitable aging with chronic disease, Illness, identity, and embodied health, Cumulative inequality of health in care delivery settings and community built environments across the life course | Nowakowski, A. C. H., Shin, J., & Carretta, H. J. (2019). Regional Risk: Mapping Single and Multiple Chronic Conditions in the United States. SAGE Open, 9(1), 1-13. doi:10.1177/2158244018822385 | | | 1 | | 1 | | | | | 1 | 1 | | | | | | |
| Nowel | Holly | Earth, Ocean & Atmospheric Science | Remote Sensing, Atmospheric Chemistry and Modeling, GIS, Fires and Smoke | Nowell HK, Holmes CD, Robertson K, Teske C, Hiers JK. 2018. A new picture of fire extent, variability, and drought interaction in prescribed fire landscapes: Insights from Florida government records. Geophys Res Lett 45:7874–7884; doi:10.1029/2018GL078679. | | | | | | | | | | | | | 1 | | 1 | | |
| Nyce | Charle s | Risk Managemen t and Insurance | Corporate Risk Management, Catastrophic Risk Financing, Alternative Risk Financing | Gatzlaff, D., McCullough, K., Medders, L. et al. The Impact of Hurricane Mitigation Features and Inspection Information on House Prices. J Real Estate Finan Econ 57, 566–591 (2018). https://doi.org/10.1007/s11146-017-9627-y | | | | | | | | | | | 1 | | 1 | | | | |
| Okam oto | Daniel A | Biological Science | Fisheries management, environmental and trophic interactions related to fluctuations in demographics | DK Okamoto, SC Schroeter, DC Reed. 2020. Effects of Ocean Climate on Spatiotemporal Variation in Sea Urchin Settlement and Recruitment. Limnology and Oceanography. | | | | | | | | | | | | | 1 | 1 | 1 | | |
| Oliveir a | Diogo | Information | Disaster recovery schemes, network function virtualization (NFV), software-defined networking (SDN), optimization, cybersecurity, network performance. | D. Oliveira, N. Ghani, J. Crichigno, X. Yang, T. Lehman, M. Hayat, E. Bou-Harb, "SDN Testbed for Evaluation of Large Exo- Atmospheric EMP Attacks", IEEE Communications Magazine, Jan. 2019. | | | | | | | | | | | | | | | | 1 | |
| Opel | Andy | Communicat ion | Documentary History, Theory and Production; Environmental Communication Campaigns; Connections Between the Environment, the Media and Consumer Culture | Opel, A. R. (2020, March). Climate Witness Project: Observations of a Changing Climate. Delivered at StockStockholm University, Department of Media Studies, Journalism, Media and Communications section, Stockholm, Sweden. (International) | | | | | | | | 1 | | | | | 1 | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|---|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Ordon ez | Camilo | Mechanical Engineering | Dynamic modeling of legged and wheeled vehicles, Terrain identification, Motion planning, Control | Ordonez C. et al. (2020) Characterization and Traversal of Pliable Vegetation for Robot Navigation. In: Xiao J., Kröger T., Khatib O. (eds) Proceedings of the 2018 International Symposium on Experimental Robotics. ISER 2018. Springer Proceedings in Advanced Robotics, vol 11. Springer, Cham. https://doi.org/10.1007/978-3-030-33950-0_26 | | | | | | | | | 1 | | | | | | | | |
| Ordon ez | Juan | Mechanical Engineering | Thermodynamics heat transfer; Thermodynamic optimization; Computational heat transfer; Advanced power systems; Fuel cells; Heat exchanger design cooling of electronics; Micro-channels | Raimundo, R. C., Vargas, J. V. C., Ordonez, J. C., Balmant, W., Polla, P. T. B., Mariano, A. B., & Marino, C. E. B. (2019). A sustainable alkaline membrane fuel cell (SAMFC) stack characterization, model validation and optimal operation. International Journal of Hydrogen Energy. | | | | | | | 1 | | | | | | | | | | |
| Owen s | Jerem y D | Earth, Ocean & Atmospheric Science | Vanadium isotopes fingerprinting low oxygen environments, Thallium isotopes to track marine Mn-oxide burial, marine biogeochemistry during Phanerozoic climatic events | Ostrander, C. M., Owens, J. D., Nielsen, S. G., Lyons, T. W., Shu, Y., Chen, X., Sperling, E. A., Johnston, E. A., Sahoo, S. K., & Anbar, A. D. (2020). Thallium isotope ratios in shales from South China and northwestern Canada suggest widespread O2 accumulation in marine bottom waters was an uncommon occurrence during the Ediacaran Period. Chemical Geology, 557, 119856. doi:10.1016/j.chemgeo.2020.119856 | | | | | | | | | | | | | 1 | 1 | | | |
| Ozguv en | Eren Erman | Civil & Environment al Engineering | Modeling of Emergency Evacuation Operations, Emergency Inventory Management, Simulation & Modeling of Transportation Networks, Traffic Safety & Accessibility, Multi-modal Transportation, Intelligent Transportation Systems, Smart Cities & Urban Mobility | Ghorbanzadeh, M., Burns, S., Rugminiamma, L. V. N., Ozguven, E. E., and Huang, W., "Spatiotemporal Analysis of Highway Traffic Patterns in Hurricane Irma Evacuation", Accepted for Publication in the Transportation Research Record, 2021, https://doi.org/10.1177/03611981211001870. | | | | | | | | | 1 | | 1 | | | | | | |
| Pable | Jill | Interior Architecture and Design | Built environments for people experiencing trauma; Homeless shelter design; Interior design teaching and learning | Pable, J., McLane, Y., & Trujillo, L. (2021). Homelessness and the Built Environment: Designing for Unhoused Persons. Routledge. | 1 | | | | | | | | | | 1 | | | | | | |
| Pamid i | Sastry | Electrical & Computer Engineering | Superconducting Power Systems, Novel Methods for Characterization of Power System Components, Systems Engineering, Applied Cryogenics | Intelligent Quench Detection Methods for HTS Magnet Applications | | | | | | | 1 | | 1 | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | • | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------------------|---------------|--|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Parfitt | Rhys | Earth, Ocean & Atmospheric Science | Marine meteorology, mid-latitude climate variability, atmosphere-ocean interactions, socio-economic impact of extreme weather in a warming climate | A.Wanamaker Jr., S.Griffin, C.Ummenhofer, N.Whitney, B.Black, R.Parfitt, E.Lower, D.Introne, K.Kreutz, "Pacific climate influences on ocean conditions and extreme shell growth events in the Northwestern Atlantic (Gulf of Maine)", (Climate Dynamics, 2019). | | | | | | | | | | | | | 1 | 1 | | | |
| Park | Toby | Educational Leadership and Policy Studies | Student outcomes in postsecondary education, potential policy initiatives that could improve student success, with a particular focus on non-traditional students | Mokher, C.G., Park-Gaghan, T.J. & Hu, S. What Happens to Efficiency and Equity? The Cost Implications of Developmental Education Reform. Res High Educ 62, 151–174 (2021). https://doi.org/10.1007/s11162-020-09593-w | | | | 1 | | | | | | 1 | | | | | | | |
| Pau | Stepha nie | Geography | Biogeography, biodiversity conservation, global change ecology, climate change, remote sensing | Dee, L., J. Cowles, F. Isbell, S. Pau, S. D. Gaines, P. B. Reich (2019) When do ecosystems services depend on rare species? Trends in Ecology and Evolution 34:746-758. | | | | | | | | | | | | | 1 | | 1 | | |
| Peng | Fang | Electrical & Computer Engineering | Power electronics, resilient energy delivery, control systems | Resilient Energy Delivery and Control System. (2020–2023). Funded by Department of Energy. Total award \$5,200,000. | | | | | | | 1 | 1 | 1 | | | | | | | | |
| Peres | Tanya M. | Anthropolog y | History, culture, environment, and geography of Middle Cumberland River; relationships between humans and their environments, and humans and animals - especially in terms of subsistence and how animals were incorporated into the native worldview | Peres, Tanya M., and Aaron Deter-Wolf (editors). 2019. The Cumberland River Archaic of Middle Tennessee. University Press of Florida, Gainesville. | | | | | | | | | | | 1 | | 1 | 1 | 1 | | |
| Perez- Felkn er | Lara | Educational Leadership and Policy Studies | Impact of social contexts on college and career outcomes, racial-ethnic, gender, and socioeconomic disparities in post-secondary educational attainment and entry to scientific career fields | Perez-Felkner, L., Felkner, J., Nix, S., & Magalhães, M. (2020). The Puzzling Relationship between International Development and Gender Equity: The Case of STEM Postsecondary Education in Cambodia. International Journal of Educational Development. https://doi.org/10.1016/j.ijedudev.2019.10210 2 | 1 | | | 1 | 1 | | | | | 1 | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |) 1 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------------|------------------------------|---|---|--|---|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| Peters on | Janet S | Scientific Computing | Ocean tidal, estuary systems | Peterson, J., & Gunzburger, M. (Sep 2016– Aug 2019). Grid generation, coupling strategies, and spatially-dependent time stepping for ocean tidal/estuary systems and other ESM components. Funded by DOE. (38448). Total award \$895,617. | | | | | | | | | | | | | | 1 | | | |
| Pevnit skaya | Svetla na | Economics | Applied Microeconomic Theory, Auctions, Game Theory, Experimental and Behavioral Economics | R. Mark Isaac, Douglas A. Norton, and Svetlana Pevnitskaya, A New Experimental Mechanism To Investigate Polarized Demands For Public Goods: The Effects Of Censoring, Experimental Economics 22: 585- 609, 2019. | | | | | | | | 1 | | | | | | | | | |
| Phillip s | Beth | Educational Psychology and Learning Systems | School readiness and successful early childhood education especially during preschool and in particular for children from backgrounds of poverty | Little, C., Hart, S., Phillips, B. M., Schatschneider, C., & Taylor, J. (2019). Exploring neighborhood environmental influences on reading comprehension. Journal of Applied Developmental Psychology, 62, 173-184. | 1 | | | 1 | | | | | | | | | | | | | |
| Plant | Elizab eth (Ashby) | Psychology | Prejudice and stereotyping; intergroup interactions; the role of motivation in the regulation of prejudice; prejudice reduction process. | Columb, C., & Plant, E. A. (2019). "A little bird told me": Consequences of holding an implicit association between women and birds. European Journal of Social Psychology, 49, 589-603. | | | | | 1 | | | | | | | | | | | | |
| Ponde r | Sage | Geography | Municipal debt; urban social reproduction; infrastructure; geographies of racialization; urban social movements; just socio-ecological transitions; socio-spatial theory; political economy | CS Ponder (2021) Spatializing the Municipal Bond Market: Urban Resilience under Racial Capitalism, Annals of the American Association of Geographers, DOI: 10.1080/24694452.2020.1866487 | | | | | | | | | | 1 | 1 | | 1 | | | | |
| Powell | Emily | COAPS | Climate Science, Infrastructure & Planning | Powell, E. and R. Fikes. 2020. A stressors- based needs assessment to inform Gulf Coast Restoration Decision Making. Ecological Restoration, 38:3. E-ISSN 1543- 4079. | | | | | | | | 1 | | | | | 1 | 1 | 1 | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------------|---------------------|---|---|--|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|
| Proffitt | Jennife r | Communicat ion | Political Economy of Communications; Media Industries and Production Processes; Mass Communication History and Regulation; Media Law and Policy; Democratic Communications | Garcia, C. J., & Proffitt, J. M. (2021). Elite company: Sourcing trends in 2014-2017 prestige press climate change editorials. Environmental Communication. Retrieved from Advance online publication. https://doi.org/10.1080/17524032.2020.18666 35 | | | | | | | | 1 | | | | | 1 | | | | |
| Quaife | Bryan | Scientific Computing | Scientific computing, integral equation methods, fluid dynamics, fire dynamics | Bryan Quaife and Kevin Speer. A Simple Model for Wildland Fire Vortex-Sink Interactions. Atmosphere 12(8), 2021. | | | | | | | | | | | | | | | 1 | | |
| Radey | Meliss a | Social Work | Informal Support, Informal/Social Support Among Those Involved in the Child Welfare System, Public and Private Safety Nets, Welfare Policy | Danielle Groton, Melissa Radey, "I've Been through It": Assessing Employment Barriers among Unaccompanied Women Experiencing Homelessness, Social Work Research, 2021;, svab003, https://doi.org/10.1093/swr/svab003 | | | | | 1 | | | 1 | | | | | | | | | |
| Ralsto n | Penny A | Family and Child Sciences | Social determinants of health, heart health rural African Americans, church-based weight management | Tucker, C. M., Kang, S., Ukonu, N. A., Linn, G. S., DiSangro, C. S., Arthur, T. M., & Ralston, P. A. (2019). A culturally sensitive church-based Health-Smart intervention for increasing health literacy and health- promoting behaviors among Black adult churchgoers. Journal of Health Care for the Poor and Underserved, 30, 80-101. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/308279 71 doi:10.1353/hpu.2019.0009 | | | 1 | | | | | | 1 | | 1 | | | | | | |
| Rama krishn an | Subra mania n | Chemical & Biomedical Engineering | Structure, dynamics and rheology of nanoparticle suspensions and gels, Biomass conversion to biofuels and value added chemicals, and Processing of protein suspensions (as related to diseases and drug delivery). | Shan, X., Mao, P., Li, H., Geske, T., Bahadur, D., Xin, Y., Ramakrishnan, S., & Yu, Z. (2019). 3D-Printed Photoactive Semiconducting Nanowire–Polymer Composites for Light Sensors. ACS Applied Nano Materials. doi:https://doi.org/10.1021/acsanm.9b01763 | | | | | | | 1 | | | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------------------------|------------------------------------|---|--|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| Ramo s- Matto ussi | Flavia | Learning Systems Institute | Development of participatory research methods, including visual sociology, life histories and biographical approaches in research | Hall-Mills, Shannon & Barnes, Adrienne & Mekonnen, Dawit & Fesmire, Marion & Ramos-Mattoussi, Flavia. (2021). Contextualizing Pre-Service Teacher Education Materials and Instruction in Multilingual Ethiopia. 10.1163/9789004449671_009. | | | | 1 | | | | | | | | | | | | |
| Rando Iph | Karen | Social Work | Child welfare, technology in child welfare, workforce wellbeing in child welfare, resilience, environmental justice in social work education | Leah P. Cheatham & Karen Randolph (2020) Education and Employment Transitions among Young Adults with Disabilities: Comparisons by Disability Status, Type and Severity, International Journal of Disability, Development and Education, DOI: 10.1080/1034912X.2020.1722073 | | | | 1 | | | | 1 | 1 | | | | | | | |
| Raney | Arthur A | Communicat ion | Media Psychology, Entertainment Theory, Media and Morality, Media Effects, Entertainment Media Audiences, Inspirational and Self-Transcendent Media | Principal investigator. Traumatization Following Major Disasters among Hurricane Maria Evacuees in Florida: Positive Media and Posttraumatic Growth. Submitted to Florida State University, Collaborative Collision Seed Fund (October 2018- September 2019). Total award \$24,824. | | | 1 | | | | | | | | | | | | | |
| Rass weiler | Andre w James Hanco ck | Biological Science | Natural resource management, ecosystem resilience, temperate and tropical reef ecosystems | Rassweiler, A., M. Lauer, S.E. Lester, S.J. Holbrook, R.J. Schmitt, R. Madi Moussa, K.S. Munsterman, H.S. Lenihan, A.J. Brooks, J. Wencélius, J. Claudet. Perceptions and Responses of Pacific Island Fishers to Changing Coral Reefs. Accepted at Ambio. | | | | | | | | | | | | 1 | 1 | 1 | | |
| Reeno ck | Christo pher K | Political Science | Democratic regime stability, comparative public policy, legislative-bureaucratic stability, environmental regulatory policy | 2018. David Konisky and Christopher Reenock. "Regulatory Enforcement, Riskscapes, and Environmental Justice." Policy Studies Journal 46(1):7-36 | | | | | | | | | | | | | | 1 | 1 | |
| Reid Marks | Laura | Educational Psychology and Learning Systems | Health disparities in people of color (microaggressions, mental health, and health behaviors), career and professional development issues | Reid Marks, L., Ciftci, A., & Lee, B.* (2019). Ethnic identity and psychological well-being in Jamaican immigrants: Mainstream comfort and social affiliation as moderators. Caribbean Journal of Psychology, 11 (1), 33- 55. | | | 1 | | | | | 1 | 1 | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 1 | D | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------------|---------------|---|--|---|---|---|---|---|---|---|---|-----|---|---|----|----|----|----|----|----|----|
| Rhyna rd | Tiffany | Dance | Storytelling capabilities of the body - how it's linked to politics, oppression and the need for social justice reform, Body and Social Justice | Not My Enemy (Currently in Production) | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | | | | | | | 1 | |
| Ritz | Wendy | Marketing | Sales, digital marketing, international marketing, sharing economy, prosumers | Marco Wolf, Wendy Ritz & Shaun McQuitty (2020) Prosumers who home brew: a study of motivations and outcomes, Journal of Marketing Theory and Practice, 28:4, 541- 552, DOI: 10.1080/10696679.2020.1801321 | | | | | | | | 1 | | | | | | | | | |
| Rober ts | Diane | English | Southern culture, Florida wildlife, Apalachicola Ecology | "Capital Dame: A Home as Wild as the Land", Flamingo, August 26, 2019 | | | | | | | | | | | | | | | 1 | | |
| Rober tson | Kevin | Biological Science | Fire ecology, land conservation, wildlife ecology, agronomy and soils, forest resources | Kevin M Robertson, Sharon M Hermann, Eric L Staller, Frequent Prescribed Fire Sustains Old Field Loblolly Pine–Shortleaf Pine Woodland Communities: Results of a 53-Year Study, Journal of Forestry, 2021;, fvab035, https://doi.org/10.1093/jofore/fvab035 | | | | | | | | | | | | | 1 | | 1 | | |
| Rodge rs | Ryan | NHMFL | Oil weathering, oil toxicity, molecular characterization of contaminants | Sydney F. Niles, Martha L. Chacón-Patiño, Samuel P. Putnam, Ryan P. Rodgers, and Alan G. Marshall. Environmental Science & Technology 2020 54 (14), 8830-8836. DOI: 10.1021/acs.est.0c02263 | | | | | | | | | | | | 1 | | | | | |
| Roehri g | Alysia | Educational Psychology and Learning Systems | Effective Teacher Practices; Reading and Motivation; School Climate and Leadership; Teacher Knowledge and Beliefs; Teacher Preparation and Professional Development; Teacher Reflection. | Ha, C., Durtschi, S., Roehrig, A. D., Turner, J., Craig, M., Mesa, M. P., & Funari, C. (2021). Promoting children's reading motivation with culturally relevant reading education. Florida Journal of Educational Research, 59, 268-282. Retrieved from https://feraonline.org/fjer/3653/ | | | | 1 | | | | | 1 | | | | | | | | |
| Rohlin ger | Deana | Sociology | Social movements; Mass media; Political participation; Political culture and democratic processes | Rohlinger, D. A., Olsen, A.(u), & Hewitt, L. (2020). Dualing Discourse: Democracy, Gender Equity and Discursive Politics in Rural Morocco. Women's Studies International Forum, 81. doi:10.1016/j.wsif.2020.102373 | | | | | 1 | | | | | | | | | | | 1 | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|-------------------------|---|--|---|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|
| Rosad o | Javier | FSU Center for Child Stress and Health | Latino childhood obesity, toxic stress/adverse childhood experiences, dissemination and implementation of best practices with adaptations for underserved populations and within integrated behavioral health systems | Rosado, J.I., Ramirez, A., Montgomery, J. Reyes, E., Wang, Y. (2021). Adverse childhood experiences and its association with emotional and behavioral problems in U.S. children of Latino immigrants. Child Abuse & Neglect, 112. DOI:10.1016/j.chiabu.2020.104887 | | | 1 | | | | | | | 1 | | | | | | | |
| Rouss eau | Horaci o | Managemen t | Sustainability; organizations & Communities; Organizational Learning; Ethics; Impression Management | Rousseau, H., Berrone, P. & Gelabert, L. 2019 (In Press). Localizing Sustainable Development Goals: Nonprofit Density and City Sustainability. Academy of Management Discoveries. | | | | | | | | | | | 1 | | | | | | 1 |
| Rust | Georg e | Behavioral Science & Social Medicine | Primary health care and community health for those in greatest need, the elimination of health disparities, charting a path to health equity | Modeling Paths to Cancer Health Equity | | | 1 | | 1 | | | | | 1 | | | | | | | |
| Ryan | Erin | Law | Public trust, private water allocation | The Public Trust Doctrine, Private Rights in Water, and The Mono Lake Story (Cambridge University Press) (forthcoming 2021). | | | | | | 1 | | | | | | | | 1 | | | |
| Salter s | Vincen t | Earth, Ocean & Atmospheric Science | Igneous petrology and trace element and isotope geochemistry in the broadest sense | Vincent Perrot, William M. Landing, R. Dean Grubbs, Vincent J.M. Salters. Mercury bioaccumulation in tilefish from the northeastern Gulf of Mexico 2 years after the Deepwater Horizon oil spill: Insights from Hg, C, N and S stable isotopes. Science of The Total Environment, Volume 666, 2019, Pages 828-838, ISSN 0048-9697, https://doi.org/10.1016/j.scitotenv.2019.02.29 5. | | | | | | | | | | | | 1 | | 1 | | | |
| Sang | Qing- Xiang (Amy) | Chemistry & Biochemistry | Biochemical mechanisms of human breast, prostate, and brain cancer initiation, progression, metabolism, angiogenesis, and invasion for cancer biomarker and drug discovery; Environmental toxins are also evaluated using human cell lines and brain organoids | Exposure of Human Lung Cells to Polystyrene Microplastics Significantly Retards Cell Proliferation and Triggers Morphological Changes. Kerestin E. Goodman, Joan T. Hare, Zahraa I. Khamis, Timothy Hua, and Qing-Xiang Amy Sang. Chemical Research in Toxicology 2021 34 (4), 1069-1081. DOI: 10.1021/acs.chemrestox.0c00486 | | | 1 | | | | | | | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------------|---------------|-----------------------------|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Sanya I | Paromi ta | Sociology | Development, Gender, Economic Sociology, Political Sociology, Global & Transnational Sociology, Qualitative Methods, India & South Asia | Sanyal, P. (2019). "From Brides to Business Owners: Microfinance and Women's Entrepreneurship.". Journal of Business Anthropology, 8(2), 250-272. doi:https://doi.org/10.22439/jba.v8i2.5851 | | | | | 1 | | | 1 | | | | | | | | | |
| Schur ko | Rob | Chemistry & Biochemistry | Solid State Chemistry, Computational Chemistry, Photochemistry and Spectroscopy | FSU chemist awarded \$1M Department of Energy grant to explore clean energy materials | | | | | | | 1 | | | | | | | | | | |
| Scott | Maura | Marketing | Consumer behavior, specifically related to consumption communities, social issues related to the consumption of space and place, and community resources and consumer well-being | Mende, Martin, Linda C. Salisbury, Gergana Y. Nenkov, and Maura L. Scott, (2020) "Improving Financial Inclusion through Communal Financial Orientation: How Financial Service Providers Can Better Engage Consumers in Banking Deserts," Journal of Consumer Psychology. 30(2), 379- 91. | | | | | | | | 1 | | | | | | | | | |
| Scott Shield s | Sarah | Art Education | Qualitative research methodologies, arts- based educational research practitioner research, curriculum and pedagogy, visual journaling, visual thinking, teacher identity development, teacher education | Sara Scott Shields, Rachel Fendler & Danielle Henn (2020) A Vision of Civically Engaged Art Education: Teens as Arts-Based Researchers, Studies in Art Education, 61:2, 123-141, DOI: 10.1080/00393541.2020.1740146 | | | | 1 | | | | | | | | | | | | | |
| Shatru k | Michae I | Chemistry & Biochemistry | Photo-switchable molecular materials, intermetallic magnets for magnetic refrigeration and electric vehicles, and low- dimensional magnetic materials | Romanini, M., Wang, Y., Gürpinar, K., Ornelas, G., Lloveras, P., Zhang, Y., Zheng, W., Barrio, M., Aznar, A., Gràcia-Condal, A., Emre, B., Atakol, O., Popescu, C., Zhang, H., Long, Y., Balicas, L., Tamarit, J. L., Planes, A., Shatruk, M., Mañosa, L., Giant and Reversible Barocaloric Effect in Trinuclear Spin-Crossover Complex Fe3(bntrz)6(tcnset)6. Adv. Mater. 2021, 33, 2008076. https://doi.org/10.1002/adma.202008076 | | | | | | | 1 | | | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|-----------------|---|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Shoel e | Kouros h | Mechanical Engineering | Interface between mechanics and physics, fluid-structure interaction, bio-inspired engineering, renewable energies, biolocomotion and biomechanics | Oluwafemi Ojo, David Tan, Yu-Cheng Wang, Kourosh Shoele, and Alper Erturk "Aspect ratio effects in wind energy harvesting using piezoelectric inverted flags", Proc. SPIE 10967, Active and Passive Smart Structures and Integrated Systems XIII, 109670Q (27 March 2019); https://doi.org/10.1117/12.2519527 | | | | | | | 1 | | | | | | | | | | |
| Shute | Valerie | Educational Psychology and Learning Systems | Design, development, and evaluation of advanced systems to support competencies; exploratory and confirmatory tests of aptitude- treatment interactions; student modeling research; developing automated knowledge elicitation and organization tools | Smith, G., Fulwider, G. C., Liu, Z., Lu, X., Li, J., & Shute, V. J. (submitted). Eliminating barriers to STEM: An examination of students' perceived competence and the influence of gender and ethnicity in a physics learning game. Computers in Human Behavior. Manuscript submitted for publication, 30 pages. | | | | 1 | 1 | | | | | 1 | | | | | | | |
| Sirma ns | G. Stacy | Risk Managemen t and Insurance | Real estate finance, housing demand, impact of sinkhole claims on house prices | Dumm, R.E., Nyce, C., Sirmans, G.S. et al. Pricing Moral Hazard in Residential Properties: The Impact of Sinkhole Claims on House Prices. J Real Estate Finan Econ (2020). https://doi.org/10.1007/s11146-020- 09804-2 | | | | | | | | | | | 1 | | 1 | | | | |
| Slate | Elizab eth H | Statistics | Longitudinal data analysis, Bayesian modeling and recurrent events, with applications in oral health research, disease biomarkers and other health research areas | Abbott L, Slate E, Graven L, Lemacks J, Grant J. Fatalism, Social Support and Self- Management Perceptions among Rural African Americans Living with Diabetes and Pre-Diabetes. Nursing Reports. 2021; 11(2):242-252. https://doi.org/10.3390/nursrep11020024 | | | 1 | | | | | | | 1 | | | | | | | |
| Smith | Shawn | COAPS | Assessing and improving the quality of meteorological and underway flow-water observations collected on oceanographic research vessels, international marine climate | Smith, S. R., G. Alory, A. Andersson, W. Asher, A. Baker, D. I. Berry, K. Drushka, D. Figurskey, E. Freeman, P. Holthus, T. Jickells, H. Kleta, E. C. Kent, N. Kolodziejczyk, M. Kramp, Z. Loh, P. Poli, U. Schuster, E. Steventon, S. Swart, O. Tarasova, L. Petit de la Villéon, and N. Vinogradova-Shiffer, 2019: Ship-Based contributions to global ocean, weather, and climate observing systems. Frontiers in Marine Science, 6:434. https://doi.org/10.3389/fmars.2019.00434 | | | | | | | | | | | | | 1 | 1 | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|--------------------------------|---|--|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| Soban jo | John | Civil & Environment al Engineering | Infrastructure Engineering and Management, Materials, Construction Methods, & Sustainability, Transportation Engineering- Advanced Technologies including GPS and GIS. | Inkoom, S., and Sobanjo, J., (2019). Competing risks models for the deterioration of highway pavement subject to hurricane events, Structure and Infrastructure Engineering. 15 (6), 837-850. Taylor & Francis. https://doi.org/10.1080/15732479.2019.15812 29 | | | | | | | | 1 | | | | | | | | |
| Speer | Kevin G | Geophysical Fluid Dynamics Institute | Global ocean circulation, dynamics of hydrothermal plumes, environmental modeling and software | Bebieva, Yana, and Kevin Speer. (2019). The Regulation of Sea Ice Thickness by Double- Diffusive Processes in the Ross Gyre, Journal of Geophysical Research: Oceans 124 (10), 7068-7081 | | | | | | | | | | | | 1 | 1 | | | |
| Spenc er | Robert Georg e Martin | Earth, Ocean & Atmospheric Science | Riverine biogeochemistry, glacier biogeochemistry, organic matter method development | Kellerman, A.M., Hawkings, J.R., Wadham, J.L., Kohler, T.J., Stibal, M., Grater, E., Marshall, M., Hatton, J.E., Beaton, A., Spencer, R.G.M. 2020. Glacier outflow dissolved organic matter as a window into seasonally changing carbon sources: Leverett Glacier, Greenland. Journal of Geophysical Research-Biogeosciences, 125: doi: 10.1029/2019JG005161. | | | | | | | | | | | | 1 | | | | |
| Staley | Samue I | DeVoe Moore Center | Transportation system management and performance, public private partnerships, growth management, and regulatory reform | Millsap, Adam and staley, samuel and Nastasi, Vittorio, Assessing the Effects of Local Impact Fees and Land-Use Regulations on Workforce Housing in Florida (January 4, 2019). Available at SSRN: https://ssrn.com/abstract=3310243 or http://dx.doi.org/10.2139/ssrn.3310243 | | | | | | | | | | 1 | | | | | | 1 |
| Steure r | Michae I | Electrical & Computer Engineering | Electric Power System, Real time hardware in the loop simulations, Fault current limiters, Superconducting power apparatus, Cyber- physical power systems | S. K. Mazumder et al., "A Review of Current Research Trends in Power-Electronic Innovations in Cyber-Physical Systems," in IEEE Journal of Emerging and Selected Topics in Power Electronics, doi: 10.1109/JESTPE.2021.3051876. | | | | | | | 1 | 1 | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|----------------|---|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Stieg man | Albert | Chemistry & Biochemistry | Environment and Energy, Solid State Chemistry, Synthesis and Catalysis | Jianli Hu, Christina Wildfire, Albert E. Stiegman, Robert A. Dagle, Dushyant Shekhawat, Victor Abdelsayed, Xinwei Bai, Hanjing Tian, Mitchelle B. Bogle, Cera Hsu, Yan Luo, Stephen D. Davidson, Yuxin Wang, Microwave-driven heterogeneous catalysis for activation of dinitrogen to ammonia under atmospheric pressure, Chemical Engineering Journal, Volume 397, 2020, 125388, ISSN 1385-8947, https://doi.org/10.1016/j.cej.2020.125388. | | | | | | | 1 | | | | | 1 | 1 | | | | |
| Strode | Georgi anna | Florida Resources and Environment al Analysis Center | Geographic Information Systems (GIS), Maps, Data science, Visual analytics, dasymetric population estimation, geovisualization, exploring the potential of using the US National Grid (USNG) | Georgianna Strode, Victor Mesev, Susanne Bleisch, John Derek Morgan, Kathryn Ziewitz, Fennis Reed. "Exploratory bivariate and multivariate geovisualizations of a social vulnerability index." Cartographic Perspectives, Number 95. 2020. | | | | | | | | | 1 | 1 | 1 | | | | | | |
| Strous e | Geoffr ey | Chemistry & Biochemistry | Sustainability, energy, optical rulers and catalysis | Hardy, D.A.; Nguyen, E.T.; Parrish, S.A.; Schriber, E.A.; Schlicker, L.; Gili, A.; Kamutzki, F.; Hohman, J.N.; Strouse, G.F. Prussian Blue Iron–Cobalt Mesocrystals as a Template for the Growth of Fe/Co Carbide (Cementite) and Fe/Co Nanocrystals. Chem. Mater. 2019, 31, 19, 8163-8173. | | | | | | | 1 | | | | | 1 | 1 | | | | |
| Stukel | Michae I R | Earth, Ocean & Atmospheric Science | The biological pump, plankton trophic dynamics, balance of new and export production, biogeochemical modeling | Stukel, M. R., T. B. Kelly, M. R. Landry, K. E. Selph, R. Swalethorp (2021). Sinking carbon, nitrogen, and pigment flux within and beneath the euphotic zone in the oligotrophic, open- ocean Gulf of Mexico. Journal of Plankton Research. doi: 10.1093/plankt/fbab001 | | | | | | | | | | | | 1 | 1 | 1 | | | |
| Sun | Yansh uo | Industrial & Manufacturin g Engineering | Smart Cities; Freight and Logistics; Shared Mobility; Air Transportation; Public Transit; Transportation Economics | Sun, Y., Chen, ZL., & Zhang, L. (2020). Nonprofit Peer-to-Peer Ridesharing Optimization. Transportation Research Part E: Logistics and Transportation Review, 142, 102053. | | | | | | | | 1 | 1 | | 1 | | | | | | |
| Tang | Tian | Public Administratio n | Energy Policy, Technology Policy, Technology Innovation, Public Sector Innovation, Policy Analysis, Program Evaluation. | Zeng, J., Tong, W., & Tang, T. (2020). How do clean energy policies affect industrial green development in China? Chinese Journal of Population, Resources and Environment. | | | | | | | 1 | | 1 | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | D | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|---|--|--|---|---|---|---|---|---|-----|---|----|---|----|----|----|----|----|----|----|
| Tang | Youne ng | Civil & Environment al Engineering | Biological Processes for Drinking-water Treatment, Biological Processes for Wastewater & Landfill, Leachate Treatment & Resource Recovery, Bio-remediation of Groundwater & Soil | Xiong, Y., Mason, O.U., Lowe, A. et al. Investigating promising substrates for promoting 1,4-dioxane biodegradation: effects of ethane and tetrahydrofuran on microbial consortia. Biodegradation 31, 171–182 (2020). https://doi.org/10.1007/s10532-020- 09901-2 | | | | | | 1 | | | | | | 1 | | | | | |
| Taylor | Crystal | DeVoe Moore Center | Megacities, urban development, land-use planning, sustainable development, infrastructure planning, and collective decisions | Taylor, Crystal; Wei, Qinghong. 2020. "Storytelling and Arts to Facilitate Community Capacity Building for Urban Planning and Social Work" Societies 10, no. 3: 64. https://doi.org/10.3390/soc10030064 | | | | | | | | 1 | | | 1 | 1 | | | | | |
| Taylor | John | Sociology | Social stress, ethnicity and health, social psychological factors in health and well-being, health and the environment | Salerno S, Taylor J, Kilpatrick QK. Immigrant Generation, Stress Exposure, and Substance Abuse among a South Florida Sample of Hispanic Young Adults. Socius. January 2019. doi:10.1177/2378023119843017 | | | 1 | | | | | | 1 | | | | | | | | |
| Taylor | Miles | Sociology | Aging, Family, Health | Taylor, M., Min, S. *., & Reid, K. *. (2020). Cumulative Inequality at the End of Life?: Racial Disparities in Impairment in the Time Before Death. Journals of Gerontology: Social Sciences, 75, 1292–1301. doi:doi.org/10.1093/geront/gnz109 | | | 1 | | | | | | 1 | | | | | | | | |
| Tazaz | Amand a | Learning Systems Institute | Biogeochemical analysis of hypersaline environments, Isotopic analysis of methane gas emissions from aquatic environments, Impacts of climate change on coastal environments | Kelley, C. A., Bebout, B. M., Chanton, J. P., Detweiler, A. M., Frisbee, A., Nicholson, B. E., Poole, J., Tazaz, A., & Winkler, C. (2019). The Effect of Bacterial Sulfate Reduction Inhibition on the Production and Stable Isotopic Composition of Methane in Hypersaline Environments. Aquatic Geochemistry, 25(5-6), 237-251. Retrieved from https://doi.org/10.1007%2Fs10498-019- 09362-x doi:10.1007/s10498-019-09362-x | | | | | | | | | | | | | 1 | 1 | | | |
| Thom as | Meredi th | Marketing | Consumer Behavior, Urban and Community Sociology, Psychology of Money | Baker SM, Azzari CN, Thomas MR, Bennett AM. When Does the Social Service Ecosystem Meet Consumption Needs? A Power–Justice–Access Model of Holistic Well- Being from Recipients' Perspectives. Journal of Public Policy & Marketing. 2020;39(2):220- 239. doi:10.1177/0743915620903318 | | | 1 | | | | | | | | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 10 |) | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------------|----------------|--|---|--|---|---|---|---|---|---|---|---|------|----------|----|----|----|----|----|----|----|
| Tripod i | Stephe n | Social Work | Social work education and social justice, recidivism reduction, social spending, substance use disorder treatment, therapeutic communities | Berry, K. R., Kennedy, S. C., Lloyd, M., Veeh, C., & Tripodi, S. J. (2020). The intersectional effects of race and gender on time to reincarceration. Justice Quarterly, 37, 132- 160. doi:https://doi.org/10.1080/07418825.2018.15 24508 | | | | | 1 | | | | 1 | | | | | | | | |
| Twiss | Sumne r | Religion | Comparative religious ethics, biomedical ethics, philosophy of religion, global ethics, intercultural human rights, and the comparative study of just war | Twiss, S. B. (2021). "Reflections on the Relationship Between Human Rights and Global Ethics". Multi-Religious Perspectives on a Global Ethics. | | | | | | | | | | | 1 | | | | | 1 | 1 |
| Uejio | Chris | Geography | Public health, medical geography, climate variability, climate change, vulnerability, health disparities, health interventions, environmental health, infectious diseases (mosquitoborne, waterborne, foodborne), stakeholder driven science | Bell, J. E., Brown, C., Conlon, K., Herring, S., Kunkel, K., Lawrimore, J., Luber, G., Schreck, C., Smith, A., & Uejio, C. (submitted). Changes in Extreme Weather and Climate Events: Current State of Knowledge and How it Applies to Human Health. Journal of the Air & Waste Management Association. Manuscript submitted for publication. | | | 1 | | | | | | 1 | | | | 1 | | | | 1 |
| Under wood | Nora | Biological Science | Ecology of plant-insect interactions, effects of climate change on wildflower and pollinator phenology and relative abundance | Ogilvie, J. E., S. R. Griffin, Z. J. Gezon, B. D. Inouye, N. Underwood, D. W. Inouye, and R. E. Irwin. 2017. Interannual bumble bee abundance is driven by indirect climate effects on floral resource phenology. Ecology Letters 20: 1507-1515. DOI 10.1111/ele.12854 | | | | | | | | | | | | | 1 | | 1 | | |
| Vanli | Arda (Omer) | Industrial & Manufacturin g Engineering | Statistical modeling and optimization of manufacturing processes, Bayesian methods, Design of experiments, time series analysis and forecasting, Structural health monitoring, Hurricane loss analysis | Grzegorz Kakareko, Sungmoon Jung & O. Arda Vanli (2020) Hurricane risk analysis of the residential structures located in Florida, Sustainable and Resilient Infrastructure, 5:6, 395-409, DOI: 10.1080/23789689.2019.1632599 | | | | | | | | | | | 1 | 1 | 1 | | | | |
| Von Glahn | Denise | Musicology | American Music; Musical Modernism; Charles Ives, Leo Ornstein, Edgard Varèse; Music and Place; Music and Nature; Women and Music | Von Glahn, D. (contract). "Carson, Larsen, and DDT". Manuscript under contract for publication, Oxford University Press. | | | | | | | | | | | 1 | | 1 | | 1 | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|--|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Wagg oner | Mirand a | Sociology | Medical Sociology; Bioethics; Sociology of Science; Public Health and Social Policy; Gender and Reproduction; Qualitative Methods | Ashley C. Rondini, Rachel H. Kowalsky & Miranda R. Waggoner (2021) Addressing Meso-Level Mechanisms of Racism in Medicine, The American Journal of Bioethics, 21:2, 66-69, DOI: 10.1080/15265161.2020.1861372 | | | 1 | | | | | | | 1 | | | | | | | |
| Wand ell | Robert | Chemical & Biomedical Engineering | Plasma discharges; process design; sustainable agriculture; STEM education; technology transfer/commercialization | Green chemical route to the small scale production of hydrogen peroxide | | 1 | | 1 | | | 1 | 1 | | | | | | | | | |
| Wang | Gang | Managemen t | Ethical leadership, cross-cultural validation, transformational leadership | Zhu, W., Zheng, X., He, H. et al. Ethical Leadership with Both "Moral Person" and "Moral Manager" Aspects: Scale Development and Cross-Cultural Validation. J Bus Ethics 158, 547–565 (2019). https://doi.org/10.1007/s10551-017-3740-y | | | | | | | | 1 | | | | | | | | | |
| Wang | Hui | Industrial & Manufacturin g Engineering | Manufacturing process monitoring/diagnosis/design/control/ automation (with applications to automotive manufacturing), manufacturing system design and optimization (with applications to green energy systems), and, process control and informatics for advanced materials | Chukwuzubelu Okenwa Ufodike, Hui Wang, Mohammad Faisal Ahmed, Grzegorz Dolzyk, Sungmoon Jung, Design and modeling of bamboo biomorphic structure for in-plane energy absorption improvement, Materials & Design, Volume 205, 2021, 109736, ISSN 0264-1275, https://doi.org/10.1016/j.matdes.2021.109736. (https://www.sciencedirect.com/science/article /pii/S0264127521002896) | | | | | | | | | | | | 1 | | | | | |
| Wang | Yang | Earth, Ocean & Atmospheric Science | Geochemistry, food webs in modern and fossil ecosystems, biogeochemical cycling of carbon and nutrients, water cycle | Wu, X., Zhang, L., Hu, B. X., Wang, Y., & Xu, Z. (2020). Isotopic and hydrochemical evidence for the salinity origin in the coastal aquifers of the Pearl River Delta, Guangzhou, China. Journal of Contaminant Hydrology, 235, 103732. doi:10.1016/j.jconhyd.2020.103732 | | | | | | 1 | | | | | | | | | 1 | | |
| Ware | Matthe w | Earth, Ocean & Atmospheric Science | Modeling wave exposure at sea turtle nesting beaches, monitoring sea turtle habitat use and population demographics, investigating boat strike mitigation strategies for sea turtle conservation on Florida's Atlantic Coast | Ware M, Ceriani SA, Long JW, Fuentes MMPB. Exposure of Loggerhead Sea Turtle Nests to Waves in the Florida Panhandle. Remote Sensing. 2021; 13(14):2654. https://doi.org/10.3390/rs13142654 | | | | | | | | | | | | | 1 | 1 | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------------------|---------------|---|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Weath erspo on | Mark | Electrical & Computer Engineering | Modeling of energy storage devices using electrochemical impedance spectroscopy, Modeling of bioluminescence in biological organisms, Synthesis and optimization of antenna response parameters | Venroy George Watson et al 2019 Meet. Abstr. MA2019-01 59 | | | | | | | 1 | | | | | | | | | | |
| Welch | Tana Jean | Family Medicine and Rural Health | American poetics, feminist science studies, posthumanism, and new materialism | Welch, T.J. Seasteading. Pleiades: Literature in Context, Volume 40, Issue 1, 2020, pp. 176-181 (Article) | | | | 1 | | | | | | | | | | | | | |
| Wend orf Muha mad | Jessic a | Communicat ion | Hypervulnerable populations and health disparities; Participatory methodology and mixed methods approach; Applied Communication; Systems and systems thinking/approach; Communication for Development | Yang, Fan & Muhamad, Jessica & Yang, Qinghua. (2019). Exploring Environmental Health on Weibo: A Textual Analysis of Framing Haze-Related Stories on Chinese Social Media. International Journal of Environmental Research and Public Health. 16. 2374. 10.3390/ijerph16132374. | | | 1 | | | | | | | 1 | | | | | | | |
| Whall ey | David | Computer Science | Energy efficient computer processors | "Improving Energy Efficiency by Memoizing Data Access Information" by M. Stokes, R. Baird, Z. Jin, D. Whalley, S. Onder in the Proceedings of the ACM/IEEE International Symposium on Low Power Electronics and Design, July 2019. | | | | | | | 1 | | | | | | | | | | |
| Whyte | James | Nursing | Development of expert performance in nurses and other healthcare professionals, care of people living with HIV/AIDS | Whyte, J., Whyte, M., & Dickey, S. (In press). "A Study of HIV Positive Undocumented African Migrants' Efforts to Access Health Services in the UK". Journal of Nursing Education and Practice. | | | 1 | | | | | | | 1 | | | | | | | |
| Whyte | Maria | Nursing | Improvement of health for vulnerable populations | Whyte, J., Whyte, M., & Dickey, S. (2019). A study of HIV positive undocumented African migrants' access to health services in the UK. Journal of Nursing Education and Practice, 9, 122-131. Retrieved from http://sciedu.ca/journal/index.php/jnep/article/ view/12327 doi:10.5430/jnep.v9n1p122 | | | 1 | | | | | | | 1 | | | | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---------------|---|--|--|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Wiend ers | Nico | Earth, Ocean & Atmospheric Science | Ocean circulation, pollution tracking, engineering | Van Sebille Erik, Zettler Erik, Wienders Nicolas, Amaral-Zettler Linda, Elipot Shane, Lumpkin Rick. (2021). Dispersion of Surface Drifters in the Tropical Atlantic. Frontiers in Marine Science, 7. DOI=10.3389/fmars.2020.607426. | | | | | | | | | | | | | 1 | | | |
| Wing | Allison | Earth, Ocean & Atmospheric Science | Tropical Convection and Climate, Tropical Cyclones | Ruppert, Jr., J.H., A.A. Wing, X. Tang, and E.L. Duran (2020): The critical role of cloud- infrared radiation feedback in tropical cyclone development, Proc. Nat. Acad. Sci., 117, 27884-27892, doi:10.1073/pnas.2013584117. | | | | | | | | | | | | 1 | | | | |
| Winn | Alice A | Biological Science | Plant population biology, life-history evolution, and ecological genetics. | Ramirez-Bullon, N., Winn, A. A., & Negron- Ortiz, V. (presented 2020, March). Demographic analysis of a dioecious threatened plant and the consequences of not having complete data. Poster presentation at Southeastern Partners in Plant Conservation Conference, Atlanta Botanical Garden, Atlanta, GA. (National) | | | | | | | | | | | | | | 1 | | |
| Wong | Sandy | Geography | Health inequalities, social processes of disablement and mobility, environmental influences on health, mixed quantitative and qualitative methods, health GIS | Wong, S., McLafferty, S., Planey, A. & Preston, V. 2020. Disability, wages, and commuting in New York. Journal of Transport Geography, 87. DOI: 10.1016/j.jtrangeo.2020.102818 | | | 1 | | | | | | 1 | 1 | | | | | | |
| Wright | James | Public Administratio n | Public Management, Public Administration, Public Policy, Criminal Justice, Social Justice, Critical Race Theory | Mutono N, Wright J, Mutembei H et al. The nexus between water sufficiency and water- borne diseases in cities in Africa: a scoping review protocol [version 1; peer review: 2 approved with reservations]. AAS Open Res 2020, 3:12 (https://doi.org/10.12688/aasopenres.13063.1) | | | 1 | | | 1 | | | | 1 | | | | | | |
| Wu | Zhaoh ua | Earth, Ocean & Atmospheric Science | Tropical atmospheric dynamics, ENSO dynamics, global climate variability and change | Qi Liu et al 2020 Environ. Res. Lett. 15 044004 | | | | | | | | | | | | 1 | | | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 1(| 1 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|---------------|---|--|---|---|---|---|---|---|---|---|-----|----|---|----|----|----|----|----|----|----|
| Wulff | Jeanet te | Biological Science | Ecology and evolution of mutualisms, sponges, biogeographic and habitat patterns of diversity and abundance, effects of physical disturbance and pathogens on population and community dynamics | Wulff, J. L. (2020). Targeted predators defenses of sponges shape community organization and tropical marine ecosystem function. Ecological Monographs. doi:doi.org/10.1002/ecm.1438 | | | | | | | | | | | | | | | | | |
| Xu | Xiaobi ao | COAPS | Using numerical models to understand the large-scale ocean circulation, such as the Atlantic meridional overturning circulation (AMOC) and the lateral gyres of the subpolar/subtropical North Atlantic | Chassignet EP, Xu X and Zavala-Romero O (2021) Tracking Marine Litter With a Global Ocean Model: Where Does It Go? Where Does It Come From? Front. Mar. Sci. 8:667591. doi: 10.3389/fmars.2021.667591 | | | | | | | | | | | | | | 1 | | | |
| Yagho obian | Neda | Mechanical Engineering | Land atmosphere interaction, Boundary layer meteorology, Computational fluid dynamics, Urban microclimate, Energy efficiency, Sustainability in buildings | Abstract: Q05.00010 : The Role of Roof Material in Diurnal Urban Air Quality: A Coupled Large-eddy Simulation and Surface Energy Balance Analysis | | | | | | | | | | | 1 | | | | | | |
| Yang | Xiaoju n | Geography | Remote sensing, GIS, urban ecology and land change science, applied geomorphology and geohazards, China | Fang Zhang, Xiaojun Yang (2020) Improving land cover classification in an urbanized coastal area by random forests: The role of variable selection, Remote Sensing of Environment, Volume 251, 112105, ISSN 0034-4257, https://doi.org/10.1016/j.rse.2020.112105. | | | | | | | | | | | 1 | | 1 | | | | |
| Ye | Ming | Earth, Ocean & Atmospheric Science | Hydrogeology, groundwater reactive transport modeling | Sun, G., Y. Zhu, M. Ye, J. Yang, Z. Qu, W. Mao, and J. Wu (2019), Development and application of long-term root zone salt balance model for predicting soil salinity in arid shallow water table area, Agricultural Water Management,213, 486 - 498, https://doi.org/10.1016/j.agwat.2018.10.043. | | 1 | | | | 1 | | | | | | | | | | | |
| Yeboa h | Yaw | Chemical & Biomedical Engineering | Electrocatalysis/heterogeneous catalysis, Combustion and emission control, Oilfield scale formation, Coal and/or biomass conversion processes, Petroleum and natural gas production and processing, Energy, materials and the environment | Venroy George Watson et al 2019 Meet. Abstr. MA2019-01 97 | | | | | | | 1 | | | | | 1 | | | 1 | | |

| Last Name | First Name | Department | Research Interests/ Topics | Sample Publication or Project | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 10 | D 1 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|----------------|------------------------------|--|--|--|---|---|---|---|---|---|---|---|------|------------|----|----|----|----|----|----|----|
| Young | Seth A | Earth, Ocean & Atmospheric Science | Carbon and sulfur cycling, stratigraphy & sedimentary geochemistry, stable isotope biogeochemistry | Bowman, CN, Young, SA, Kaljo, D, Eriksson, ME, Them II, TR, Hints, O, Martma, T, Owens, JD, 2019, Linking the progressive expansion of reducing conditions to a stepwise mass extinction event in the late Silurian oceans. Geology 47, 968-972, doi.org/10.1130/G46571.1 | | | | | | | | | | | | | 1 | 1 | | | |
| Zhang | Mei | Industrial & Manufacturin g Engineering | Nanomaterials processing and Applications | Chao Shen, Jianxin Xie, Mei Zhang, Petru Andrei, Jim P. Zheng, Mary Hendrickson, Edward J. Plichta, A Li-Li2S4 battery with improved discharge capacity and cycle life at low electrolyte/sulfur ratios, Journal of Power Sources, Volume 414, 2019, Pages 412-419, ISSN 0378-7753, https://doi.org/10.1016/j.jpowsour.2019.01.02 9. | | | | | | | 1 | | | | | | | | | | |
| Zhang | Xiaona n | Computer Science | Wireless, internet of things, cyber physical system | Social-Aware Energy-Efficient Data Offloading With Strong Stability. Xiaonan Zhang, Pei Huang, Linke Guo, and Yuguang Fang. The IEEE/ACM Transactions on Networking (TON), vol. 27, no. 4, pp. 1515-1528, Aug. 2019. (IF = 3.597) | | | | | | | 1 | | | | | | | | | | |
| Zheng | Yangxi ng | COAPS | Physical climate system including atmospheric, oceanic, and land-surface processes using observational data sets and modeling, Asian monsoons mechanisms and its impacts | Zheng, Y., Bourassa, M.A. & Ali, M.M. Statistical evidence on distinct impacts of short- and long-time fluctuations of Indian Ocean surface wind fields on Indian summer monsoon rainfall during 1991–2014. Clim Dyn 54, 3053–3076 (2020). https://doi.org/10.1007/s00382-020-05156-y | | | | | | | | | | | | | 1 | 1 | 1 | | |
| Zierde n | David | COAPS | Downscaled and localized climate forecasts and their application to the sectors of agriculture, forestry, and water resources | Climate Change in Florida: State Climatologist David Zierden | | | | | | | | | | | | | 1 | | 1 | | |
| Zuilko wski | Stepha nie Simmo ns | Learning Systems Institute | Basic education in sub-Saharan Africa, including school quality, early literacy outcomes, and teacher implementation of policies | Zuilkowski, S. S., McCoy, D., Jonason, C., & Dowd, A. J. (2019). Relationships among home literacy behaviors, materials, socioeconomic status, and early literacy outcomes across 14 low- and middle-income countries. Journal of Cross-Cultural Psychology, 50(4), 539-555. | 1 | | | 1 | | | | | | | | | | | | | |

Appendix G: FSU Sustainable Course Guide Categorized by UN SDGs

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---------------------------------|---|--|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| ADV | 5007 | Communicat ion | FOUNDATIONS OF IMC | This course covers the development of Integrated Marketing Communication that has now become part of business models in many corporations and service organizations, as well as universities. | | | | 1 | | | | | | | 1 | 1 | | | 1 | |
| AFA | 1003 | African- American Studies | DIVERSITY & JUSTICE | This course integrates African authors, pre- and post-Apartheid, to demonstrate the problems of living in a diverse world. It fosters awareness and acceptance of people different from students through the study of the African-American culture, and stimulates an appreciation and respect for people of all cultures. | | | | | | | | | 1 | | | | | | | |
| AFA | 3330 | African- American Studies | BLACK FAMILIES | This course explores the social, economic, and cultural forces that have shaped the development of African-American families. In examining historical and contemporary transitions in the structure and functioning of African-American families, special emphasis is given to the bifurcation in the distribution of wealth and power in American society, as well as the role of racial stratification. The course also seeks to empirically examine contemporary policy and political debates on crucial issues confronting African-American families. | 1 | | | | | | | | 1 | | | | | | 1 | |
| AFA | 4358 | African- American Studies | BLK ENVIRONMENT AL HIST & POLIT | This course explores the ways that communities of African descent have understood and related to the earth. Specific emphasis is placed on how this understanding and relationship has changed over time due to the socio-historical forces of westernization, capitalism, slavery, colonialism, industrialization and urbanization. | | | | | | | | | 1 | 1 | | | | 1 | | |
| АМН | 2097 | History | RACE/ETHNICIT Y IN US | This course explores the history of immigration to the United States. Topics include the evolution of ethnic cultures and the role of race in adjustment, and related conflicts from colonial times to the present. The course does not count as credit toward the history major. | | | | | | | | | | | | | | | 1 | |
| АМН | 3374 | History | ENERGY: A HISTORY | This course offers a historical perspective on the role that technology has played in modern history. It focuses on the American experience from the Colonial period to the present. | | | | | | | 1 | | | | | | | | | |
| АМН | 3930 | History | STUDIES IN U.S. HISTORY: ENVIRONMENT AL POLICY | This is a special topics code for courses that have no permanent course code yet. This particular topic will be offered every 2-3 years. | | | | | | | | | | | | 1 | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------------|---|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| АМН | 3930 | History | STUDIES IN U.S. HISTORY: TECHNOLOGY AND CHANGE | This is a special topics code for courses that have no permanent course code yet. This particular topic will be offered every 2-3 years. | | | | | | | 1 | | | | | | | | | |
| AMH | 4420 | History | THE HISTORY OF FLORIDA | This course explores the history of Florida from its pre-Columbian origins to the present. | | | | | | | | | | | | | | | 1 | |
| АМН | 4585 | History | SEMINOLE INDIAN HIST | This course offers an ethnohistory of the Seminole Indians in Florida from prior to their formation, in the eighteenth century, to present. The course focuses on the Indians themselves and their experiences, exposing students to the history of the Seminole's culture, lifestyles, religions, economy, and tribal community. | | | | | | | | | | | | | | | 1 | |
| АМН | 4684 | History | WOMEN & CHILDREN CRM | This course examines the role of women and children in the modern day Civil Rights Movement in the United States with the underlying themes of race, class and gender. | | | | | 1 | | | | 1 | | | | | | 1 | |
| ANG | 5111 | Anthropolog y | FORAGER SOCIETIES | This course focuses on human societies throughout the world that have lived by hunting and gathering wild resources. The course examines specific subsistence strategies of a wide range of hunter- gatherer groups, relative to their technology, social structure, territory, demography and interaction with food producers in both the archaeological record and through ethnography. | | | | | | | | | | 1 | 1 | | | | | |
| ANG | 5145 | Anthropolog y | ORIGINS COMPLEX SOC | This course examines the evolution of ancient complex societies and theories of state origins using a comparative method involving ecological, economic and social approaches to investigate the origins, collapse and sustainability. | | | | | | | 1 | | | 1 | | | | | | |
| ANG | 5835 | Anthropolog y | METH UNDRWTR ARCH | This field-based course is a technical introduction to underwater archaeology, including excavation, site discovery and sampling strategies, process and history of sea level rise and site preservation, and conservation of material recovered from underwater sites. May be repeated to a maximum of nine (9) credit hours. | | | | | | | | | | 1 | | | 1 | | | |
| ANT | 2100 | Anthropolog y | INTRO TO ARCHAEOLOGY | This course is an introduction to modern anthropological archaeology. The course introduces students to the interdisciplinary scientific approaches employed in contemporary archaeological research and provides students with an overview of the origins and evolution of human social and economic systems. | | | | | | | 1 | | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-------------------------------------|--|--|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| ANT | 4465 | Anthropolog y | FOODWAYS ARCHAEOLOGY | This course addresses the topic of food from an anthropological archaeological perspective. The course examines the role food played in shaping identity, gender construction, ethnicity and rituals in past societies. The course also works to engage other disciplinary perspectives, such as those from history, literature, economics and environmental studies, as it attempts to make larger connections with the ways in which food and eating are holistically approached from an anthropological perspective. | | 1 | | | | | | | | | | | | | | |
| ARE | 5865 | Art Education | CULTURAL POLICY | This course conditions students to evaluate and proactively respond to the political environment and public policy issues that affect arts and culture at the city, county, state, national, and international levels. | | | | | | | | | | 1 | | | | | 1 | |
| ARH | 5799 | Art History | CULTURAL HERITAGE | This course is a graduate level introduction to key issues in the field of cultural heritage, including such topics as definitions of tangible and intangible cultural heritage, the role of public opinion and tourism in the protection and interpretation of cultural heritage, the impact of development and conflict, questions of authenticity and identity, international law, and ethics. | | | | | | | | | | 1 | | | | | 1 | |
| ASH | 3930 | History | STUDIES IN ASIAN HISTORY: MONSOON EMPIRES | This is a special topics code for courses that have no permanent course code yet. This particular topic will be offered every 2-3 years. | | | | | | | | | | | | | | | 1 | |
| BMS | 4007 | Health Sci Interdisciplin ary | INTRODUCTION TO MOLECULAR MEDICINE | This course introduces the concept of the main molecular mechanisms that mediate human health and disease and emphasizes molecular cell biology and immunology to understand human health and diseases, and the mechanisms that impact immune response such as inflammation and cancer. Students also participate in active learning, applying the knowledge they acquire in the lectures. | | | 1 | | | | | | | | | | | | | |
| BMS | 4932 | Health Sci Interdisciplin ary | SPECIAL TOPICS IN BIOMEDICAL SCIENCES: MOLECULES AND MEDICINE | While Introduction to Molecular Medicine is predominated by a lecture-based teaching format, this course is focused on active-learning and problem-solving exercises representing the application phase of molecular medicine. Site-visits to health facilities will also be included in this course's structure. | | | 1 | | | | | | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-------------------------------------|---|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| BMS | 4932 | Health Sci Interdisciplin ary | SPECIAL TOPICS IN BIOMEDICAL SCIENCES: PHARMACOLO GY & TOXICOLOGY | This course introduces students to the basic principles of pharmacology and toxicology. Students will develop an understanding of pharmacokinetics, pharmacodynamics, and pharmacogenomics. Students will also learn the different mechanisms of toxicity, how to monitor and assess risk of exposures, and how these exposures promote disease. Students will learn how both pharmacology and toxicology contribute to drug discovery and development | | | 1 | | | | | 1 | | | | | | | | |
| вот | 4802 | Biological Science | PLANTS AND SOCIETY | Prerequisites: BSC 2010L, BSC 2011L, CHM 1045L, and CHM 1046L. This course provides an overview of the many types of interactions between plants and people (e.g., plants as sources of food, clothing, fiber, medicine, stimulants, and poisons) with a focus on aspects of plant development, structure, function, evolution, ecology, domestication, and genetic engineering. | | 1 | | | | | | | | | | | | 1 | | |
| BSC | 1005 | Biological Science | GEN BIO NON- MAJORS | This course consists of four units of contemporary biology topics, taught by biology professors/researchers who specialize in the subject matter. Topics vary each semester. The course emphasizes the development of science proficiency by teaching students to understand, use, and interpret scientific explanations of the natural world and apply this knowledge to social, environmental, political or wellness issues. | | | 1 | | | | | | | | | 1 | 1 | 1 | | |
| BSC | 1100 | Biological Science | NATURAL HISTORY & BIODIVERSITY | This course explores Darwin's world and demonstrates why this statement is even more apt today: The foundation for all of modern biology is evolution, and evolutionary thought stands out from other important scientific principles by the way in which it transformed how science and the society in general view the natural world. This course traces the origins of biological thought from the explosion of discoveries about biological diversity arising from the Age of Exploration by northern European countries, especially the UK, the early development of natural history as a field and specifically of natural history museums as a repository of those discoveries, and how these museums and global exploration set the stage for the intellectual transformation that followed. | | | | | | | | | | | | | | 1 | | |
| BSC | 3016 | Biological Science | EUKARYOTIC DIVERSITY | This course provides an overview of the diversity of eukaryotic organisms (protists, plants, fungi and animals), the evolutionary origin of this diversity, and its societal relevance. Comparisons of exemplar organisms are used to illustrate broad themes in the anatomy, physiology, behavior, life cycles, and ecologies of all eukaryotes. | | | | | | | | | | | | | | 1 | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|-------------------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| BSC | 3052 | Biological Science | CONSERVATIO N BIOLOGY | This course focuses on the history of the conservation movement, the research on populations of animals and plants that is relevant to man's impact upon the environment, pollution in terrestrial and aquatic ecosystems, endangered species, government regulation, and sustainable development. | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | | |
| BSC | 3312 | Biological Science | MARINE BIOLOGY | This course explores marine geology, chemistry of the oceans, oceanic circulation, oceanographic techniques, the marine environment and marine life. | | | | | | | | | | | | | 1 | | | |
| CCE | 5212 | Civil and Environment al Engineering | SUSTAINABLE CONSTRUCTIO N | This course provides a comprehensive overview of the basic principles of sustainability and green construction. The course provides detailed background about the green building (LEED) certification, as well as energy calculations and cost-benefit analysis. | | | | | | | | | | 1 | | | | | | |
| CCJ | 3673 | Criminology and Criminal Justice | SOCIAL REALITY OF BLACK MALES | This course critically examines different viewpoints and non-reconciled positions about the current economic, social and political status of Black males in America. The relationship between stereotypical images and the complicated search among Black males for identity and manhood will also be explored. | | | | | | | 1 | | 1 | 1 | | | | | 1 | |
| ССЈ | 5546 | Criminology and Criminal Justice | PREV TRTMT CRM DEL | This course focuses on the theoretical development of crime prevention, punishment, and treatment. Topics include historical models of crime control, growth of crime prevention, and aspects such as environmental design, community action programs, and technology systems. | | | | | | | | | | | | | | | 1 | |
| CCJ | 5669 | Criminology and Criminal Justice | RACE/ETH/CRI ME | This course considers the relationships among race, ethnicity, and crime in the justice system. The effect of social policy on racial and ethnic inequality is studied, and theories of ethnic and racial justice are presented in terms of their effect on crime and criminal justice. | | | | 1 | 1 | | 1 | | 1 | | | | | | 1 | |
| CEG | 5705 | Civil and Environment al Engineering | ENVIRON GEOTECHNICS | This course focuses on the geotechnical aspects of waste containment and storage. Aspects of design, construction, and performance of earthen structures for storing or disposing waste or remediating contaminated sites. | | | | | | | | | | | 1 | | | | | |
| CES | 5585 | Civil and Environment al Engineering | WIND ENGINEERING | This course covers statics and dynamics of wind-induced loads and structural responses. Topics include wind damage, extreme wind probability, wind characteristics, wind pressure and forces, basics of single DOF structural dynamics, and overview of wind dynamics. State-of-the-art research in wind engineering is also introduced. | | | | | | | | | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 10 |) 1 | 1 1 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|-------------------------------------|---|---|---|---|---|---|---|---|-----|----|-----|-----|----|----|----|----|----|----|
| CGN | 3145 | Civil and Environment al Engineering | BLENDING STEM & PUBLIC POLICY | The course is thematically driven with respect to the intersection of STEM and Social Sciences on Sustainability within the themes of: (1) Food, (2) Water, (3) Energy, and (4) Climate Change. Within each area students are introduced to core theoretical concepts, historical and contemporary issues, public policy examples, institutions, personalities, geographies, governmental and non-governmental actors and communities. | | 1 | | | | 1 | 1 | | | | | | 1 | | | 1 | 1 |
| CGN | 4800 | Civil and Environment al Engineering | SENIOR DESIGN I | This course covers issues relevant to the design and construction of engineering projects; professional ethics; project planning and scheduling; design under engineering and societal constraints; importance of licensure and continuing education; as well as oral and written communication issues. Inter- or multidisciplinary teams prepare formal proposals addressing engineering challenges; the full design of these proposals is completed during the following semester in the CGN 4802, Senior Design Project course. | | | | | | | | | | | 1 | | | | | | |
| CGN | 4802 | Civil and Environment al Engineering | SENIOR DESG II | This course is a capstone senior-level design course integrating the knowledge and skills gained in undergraduate studies in civil and environmental engineering. The course involves the completion of a team-based interdisciplinary design project started in Senior Design I. This project includes industry and professional participation. | | | | | | 1 | | | | | | | | | | | |
| СНМ | 1020 | Chemistry and Biochemistry | CHEM LIBRL STUDIES | This course introduces basic chemical principles without an extensive use of mathematics and illustrates with applications in health, energy, and the environment. The course strives to show chemistry as a human endeavor that provides insight into the natural world and informs our decisions as citizens and consumers. Specific topics vary by semester. Designed as a course for students who wish to fulfill the liberal studies science requirement with chemistry and will take no further chemistry courses, not as a preparatory course for CHM 1045. Credit not allowed for CHM 1020 after taking CHM 1032, 1045, or equivalent. | | | 1 | | | | 1 | | | | | | | | 1 | | |
| СНМ | 4455 | Chemistry and Biochemistry | POLYMER CHEMISTRY | The course covers polymers (plastics) which encompass nearly every facet of our daily lives, and the rich variety of properties and functions that characterize these materials, which is deeply seeded in the chemistry and architecture of their macromolecular structure. This course broadly surveys these materials, the current state of the field, and the modern challenges and research opportunities within it. | | | | | | | | | | | | 1 | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|-------------------------------------|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| СНМ | 5450 | Chemistry and Biochemistry | POLYMER CHEMISTRY | The course covers polymers (plastics) which encompass nearly every facet of our daily lives, and the rich variety of properties and functions that characterize these materials, which is deeply seeded in the chemistry and architecture of their macromolecular structure. This course broadly surveys these materials, the current state of the field, and the modern challenges and research opportunities within it. | | | | | | | | | | | 1 | | | | | |
| СНМ | 1020C | Chemistry and Biochemistry | CHEMISTRY FOR LIBERAL STUDIES | This course introduces basic chemical principles without an extensive use of mathematics and illustrates with applications in health, energy, and the environment. This course strives to show chemistry as a human endeavor that provides insight into the natural world and informs our decisions as citizens and consumers. Specific topics vary by semester. Designed as a course for students who wish to fulfill the liberal studies science requirement with chemistry and will take no further chemistry courses, not as a preparatory course for CHM 1045. Credit is not allowed for CHM 1020 after taking CHM 1032, 1045, or equivalent. | | | 1 | | | | 1 | | | | | | | 1 | | |
| CJL | 4038 | Criminology and Criminal Justice | SOCIETY & ADM OF JUS | This course examines how law shapes and is shaped by economic relations, morality, social solidarity, state institutions, political domination, democratic governance, and legal consciousness, and how low impacts and is influenced by race, gender, and class relations. The course explores how social groups use law and legal ideology to press their rights to remedy social inequalities and to what extent these groups are successful. Students become familiar with major theoretical traditions in law and society as well as sociological issues such as civil rights, the legislation of morality, and the administration of justice. | | | | 1 | 1 | | 1 | | 1 | | | | | | 1 | |
| CLA | 3430 | Classics | HISTORY ANCIENT GREECE | This course surveys the history of ancient Greece from the Bronze Age through the Hellenistic period, with a focus on political, social, and economic developments. | | | | | | | 1 | | | | | | | | | |
| CLA | 3440 | Classics | ANCIENT ROME | This course surveys the history of ancient Rome from the Iron Age through Late Antiquity. Emphasis is on political, social, and economic developments. | | | | | | | 1 | | | | | | | | | |
| CLA | 4151 | Classics | POMPEII | This course provides a study of the archaeology of Pompeii and neighboring towns from the seventh century BCE to the first century CE. The course focuses on the functioning of an ancient city, its economy, water supply strategies and relation with the hinterlands. | | | | | | 1 | 1 | | | | | | | | | |
| CLA | 4930 | Classics | TECHNOLOGY AND ENGINEERING | This course addresses the role of technology in ancient Roman societies. | | | | | | | | 1 | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|----------------------|-------------------------------------|---|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| СОА | 5400 | Entrepreneu rship | CONSUMERS IN THE MARKETPLACE | This course examines consumer behavior, which encompasses all activities related to purchase, use, and disposal of goods and services, including the consumer's emotional, mental, and behavioral responses that precede or follow these activities. This course covers diverse topics from various disciplines to understand the enigmatic consumer and the marketplace behavior they engage in. | | | | | | | 1 | I | | | 1 | | | | | |
| СОМ | 3332 | Communicat ion | NEW COMM TECHNOLOGY | This course relates the development and the use of new communication technologies to a variety of issues, such as social, economic, health, and policy implications. | | | 1 | 1 | 1 | | 1 | I | 1 | | 1 | 1 | | | 1 | |
| СОМ | 4560 | Communicat ion | SOCIAL MARKETING | This course is an overview and application of social marketing principles and campaigns. This course is designed to familiarize students with current theory and knowledge in the field of social marketing and to provide students experience with planning a social marketing campaign. | | | | 1 | | | | | | | 1 | 1 | | | 1 | |
| СОМ | 4561 | Communicat ion | SOCIAL MEDIA CAMPAIGNS | This course prepares students to design and implement a social media campaign, and introduces them to the social, political, and ethical contexts of using new technologies. The class takes either a social advocacy or a marketing perspective. | | | | 1 | 1 | | 1 | 1 | 1 | | | | | | 1 | |
| СОМ | 5426 | Communicat ion | MEDIA, CULTR&ENVRN MT | This course examines the role of language and representation in our understanding of the natural world. The course also examines news media coverage of environmental issues, environmental images in popular culture, as well as the communication strategies of environmental organizations. | | | | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | |
| СОМ | 5565 | Communicat ion | SOCIAL MEDIA ADVOCACY CAMPGNS | This course introduces students to theories and research related to the role of social media in social change. The course also prepares students to design and implement an advocacy social media campaign. | | | | 1 | 1 | | 1 | 1 | 1 | | | | | | 1 | |
| СРО | 3034 | Political Science | POLITCS OF DEV AREAS | This course examines how economic and social conditions affect politics and government in Africa, Asia, Latin America, and/or the Middle East. Typical topics include theories of economic development, cultural influences on politics, religious and ethnic conflict, changing roles of women in the developing world, foreign aid, causes and consequences of poverty, causes of revolution, environmental policies, military regimes, and corruption. | 1 | | | | 1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 |
| СРО | 3743 | Political Science | STATES AND MARKETS | This course analyzes the multifaceted ways in which political and economic spheres interrelate. Students will be exposed to relevant debates on democracy and growth, the state's role in the economy, corruption, natural resources, and redistribution. | | | | | | | 1 | 1 | 1 | | | 1 | | | 1 | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|--------------------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| СРО | 5740 | Political Science | Comp. Pol. Econ. | This course deals with the interaction between politics and economics (or politicians and economists) in the formulation and implementation of national economic policies. The course is theoretical and empirical in orientation. | | | | | | | 1 | | 1 | | | | | | 1 | |
| CTE | 3808 | Entrepreneu rship | CONS IN COM MKTPLC | This course explores the decision making behavior of consumers in a complex and diverse marketplace, including consumer rights and responsibilities. | | | | | | | 1 | | | | | | | | | |
| CTE | 4470 | Entrepreneu rship | SUSTAINABILIT Y & HUMAN RIGHTS | This course provides an overview of social responsibility, human rights, and sustainability, and it identifies strategies and frameworks to apply to socially-responsible and sustainable business. This course also explores the roles of the consumer, corporation, and government and non-governmental organizations. | | | | | | | 1 | | | | | | | | | 1 |
| CTE | 5471 | Entrepreneu rship | SUSTAINABILIT Y & HUMAN RIGHTS | This course provides an overview of social responsibility, human rights, and sustainability, and it identifies strategies and frameworks to apply to socially-responsible and sustainable business. This course also explores the roles of the consumer, corporation, and government and non-governmental organizations. | | | | | | | 1 | | | | | | | | | 1 |
| CWR | 4101 | Civil and Environment al Engineering | ENG HYDROLOGY | This course covers the processes of the hydrologic cycle, hydrologic analyses for the planning and design of water management systems, and the use of application program packages. | | | | | | 1 | | | | | 1 | | | | | |
| CWR | 4120 | Civil and Environment al Engineering | GROUNDWATE R HYDROLOG | This course examines the fundamentals of groundwater flow and contaminant transport. Topics include: Darcy's law, flow nets, mass conservation, heterogeneity and anisotropy, storage properties, 3-D equation of groundwater flow, regional circulation, unsaturated flow, recharge, stream-aquifer interaction, well hydraulics, slug test analyses, and contaminant transport processes. | | | | | | 1 | | | | | 1 | | | | | |
| CWR | 4202 | Civil and Environment al Engineering | HYDRAULIC ENG I | This course covers principles of hydrology and hydraulics as they apply to the design of water supply, urban drainage, flood control, and hydraulic energy-conversion systems. Students use computer-aided design to devise hydraulics systems. | | | | | | 1 | 1 | | | 1 | | | | | | |
| CWR | 4540 | Civil and Environment al Engineering | WATER RESOURCES ENG | This course offers a systems approach to complex water resources problems as well as a systems analysis of water resources operations, design, and planning. | | | | | | 1 | | 1 | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|--------------------------------|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| CWR | 5635 | Civil and Environment al Engineering | WAT. RES. PLAN. &MAN | This course examines the quantity and quality planning of water resources systems. Economic considerations. | | | | | | 1 | | 1 | | | | | | | | | |
| CWR | 5824 | Civil and Environment al Engineering | COAST/ESTUA R HYDRLIC | This course examines numerous topics including coastal hydraulic principles and waves in estuaries and coastal oceans, wave properties and wave forces on coastal structures, tidal motions, mixing and transport in estuaries, and coastal engineering analysis. | | | | | | | | | 1 | | | | | 1 | | | |
| CWR | 3200L | Civil and Environment al Engineering | ENV HYDRAUL ENG LAB | This course is a hands-on introduction to environmental and hydraulic engineering topics. Physical experiments that demonstrate fundamental concepts such as hydrostatics, pipe flow, open channel flow, water quality, and water treatment processes are performed. | | | | | | 1 | | | | | | | | | | | |
| ECH | 4781 | Chemical and Biomedical Engineering | CHEM ENG/ ENVIRONMENT AL | The course aims to increase the student's appreciation of the environmental issues, risk concepts, and environmental regulations and to use this background knowledge to identify types of wastes, emissions, material use, and energy use to determine the environmental performance of chemical processes and products. The role that chemical process engineers and chemical process designers can play in solving the environmental problems will be thoroughly examined. Finally, the student is exposed to a wide variety of analysis tools required to evaluate and improve environmental performance of chemical processes. Throughout the course, the student is presented with ways to think critically, continue to learn and improve his/her level of performance not only in college, but also throughout his/her career. The use of modern engineering tools in the formulation, analysis and solution of problems in chemical engineering - environmental systems will be emphasized. | | | | | | 1 | 1 | | | | | 1 | 1 | 1 | 1 | | |
| ECH | 4824 | Chemical and Biomedical Engineering | CHEM ENG/ MATERIALS | This course provides an introduction to engineering materials, with emphasis on understanding the relation between structure, processing, and properties. In particular, the role of the atomic structure and arrangement, as well as the microstructure, in determining the physical properties of these materials is examined. In addition, polymers and modern processing techniques for improving material performance are studied. Finally, the resistance of materials to environmental factors, and factors in selection of materials for engineering applications are discussed. | | | | | | | | | 1 | | | 1 | | | | | |
| ECO | 2023 | Economics | PRIN OF MICROECON | This course covers consumption, production, and resource allocations considered from a private and social point of view; microeconomic problems and policy alternatives; economics of inequality and poverty; and comparative economic systems. | 1 | | | | | | | 1 | | | | 1 | | | | 1 | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------|-----------------------------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| ECO | 4132 | Economics | ECO OF COMPASSION | This course addresses international and domestic issues of compassionate, charitable, and philanthropic activities. It offers an economic framework from which students can critically evaluate public and private actions whose purpose is to eliminate hunger, disease, poverty or other human burdens. | 1 | 1 | 1 | | | | | 1 | | | | | | | | | |
| ECO | 4504 | Economics | PUB SECTOR ECONOMICS | This course examines the logic of collective actions, principles of government expenditures, theory and practice in taxation, shifting and incidence of taxes. | | | | | | | | 1 | | | | | | | | 1 | |
| ECO | 5506 | Economics | PUBLIC GOODS | This course explores the theory, empirical evidence, and experimental evidence regarding how human societies provide public goods. | | | | | | | | 1 | | | | | | | | | |
| ECP | 3113 | Economics | ECONOMICS POPULATION | This course examines determinants and consequences of world population growth and changes, components of population growth in more- and less-developed countries, population and food supply, nonrenewable resource interrelationships. | 1 | 1 | | | | | | 1 | | | | 1 | | | | | |
| ECP | 3143 | Economics | AFR-AMR IN US POL EC | This course examines the market, institutional, governmental, and social processes that have contributed to the economic well-being of African-Americans. Also covers theoretical material related to wage determination, labor market discrimination, and marriage and transitions in family structure, as well as interaction between race and class as determinants of the life chances of African-Americans. | 1 | | | | | | | 1 | | 1 | | | | | | 1 | |
| ECP | 3302 | Economics | NAT RESRC,ENERG, ENVR | This course focuses on the relationship between natural resource availability and growth, capital theory, economics of the environment, the U.S. energy problem and alternatives for the future, an economic appraisal of U.S. energy policy. | | | | | | | 1 | 1 | | | | 1 | | | | 1 | |
| ECP | 3403 | Economics | BUS ORG & MKT STRUC | This course is an introduction to the economic analysis of industry, a survey of market structures, oligopoly and collusion, a variety of commercial practices under imperfect competition, the welfare consequences and policy approaches to the problems of monopoly. | 1 | | | | | | | 1 | 1 | | | | | | | 1 | |
| ECP | 4613 | Economics | URBAN ECONOMICS | This course is an analysis of trends in urban economies in the U.S. and elsewhere. Introduction to economic and demographic data sources for analysis of urban areas; issues confronting contemporary urban places. | | | | | | | | 1 | | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------|--|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| ECP | 4618 | Economics | RSCH MTHDS STDY HOUSE,LND&CI TI | This course explores the use of quantitative research methods to evaluate and understand the performance of economies, with a focus on land use, housing, urban economic growth, housing finance and public finance. Each student will be responsible for identifying a research topic, defining the research question, and conducting original research as part of the course through a workshop format supervised by the instructor. | | | | | | | 1 | | | 1 | | | | | | |
| ECP | 5115 | Economics | SEM:ECON OF POPULATN | This course examines theoretical and empirical treatment of the determinants of demographic behavior in less and more developed nations, the economic consequences of the behavior, and implications of both sets of findings for population and economics policy. | 1 | | | | | | 1 | | | | | | | | | |
| ECP | 5606 | Economics | URBAN/REGION AL ECON | This course introduces students to the evolution of cities, along with issues with which cities and regions must deal (e.g., sprawl, pollution, congestion, transportation, poverty, housing and neighborhood development, public finance) to be examined from an economic perspective. The content lays the foundation for an analysis of policy alternatives to deal with these issues. | 1 | | | | | | 1 | | | 1 | | | | | 1 | |
| ECS | 3022 | Economics | SOCL ENTRPRNSHP & ECON DVLPMNT | This seminar incorporates the practical realities of economic development program implementation into the classroom, using a discussion format and case studies of real world applications. The readings are used to provide a broader context for the discussion of specific cases and more general theories. An emphasis is placed on "lessons learned" and discussion of the constraints and potential for implementing effective economic development programs in low- income areas of the United States and world, with a special focus on cities. | 1 | | | | | | 1 | | | 1 | | | | | | |
| ECS | 4013 | Economics | ECONMS OF DEVELOPMNT | This course presents economic development as a process, description and analysis; alternative overall theories of development; particular problems and policy responses to them; strategic choices in development policy. Main focus on third world economies. | 1 | | | | | | 1 | | | | | | | | | |
| ECS | 4431 | Economics | ECON OF CARIBBEAN | This course provides a detailed introduction to the analysis of economic development of Caribbean countries, including a discussion of the basic characteristics of Caribbean economies, a discussion of alternative theories and models of development, as well as a range of particular economic and social issues of concern to policy makers within Caribbean countries. Focus is on the actions available to Caribbean nations for addressing their development concerns within their region and/or country. | | | | | | | 1 | | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 1 | 1: | 2 1 | 3 1 | 4 | 15 | 16 | 17 |
|---------|--------|--|--------------------------------------|--|---|---|---|---|---|---|---|-----|----|---|----|-----|-----|---|----|----|----|
| EDA | 5191 | Educational Leadership and Policy Studies | LEAD FOR DIVERSITY | This course integrates DOE requirements of ESOL Standards for School Administrators with a) an understanding of the Consent Decree, accountability and equity issues related to LEP students; b) an understanding of compliance with federal and state regulations; and c) an understanding of cultural proficiency in the school environment. | | | | 1 | 1 | | | | 1 | 1 | | | | | | 1 | |
| EDF | 2082 | Educational Leadership and Policy Studies | INTRO TO INTL DEVELOPMENT ED | This course constitutes a basic overview of international development work in the education sector in societies of Asia, Africa, the Middle East and Latin America. The course explores different approaches to international development and how these shape and influence educational improvement initiatives in countries of the Global South. | | | | 1 | | | | | | | | | | | | | 1 |
| EDF | 5743 | Educational Leadership and Policy Studies | FOUNDATIONS OF EDUCATION | This course provides an overview of the social, cultural, philosophical, political, historical, and economic foundations of education. It examines the relationship between schools and the society in which they exist. Students examine the influences of culture, history, and economy on educational beliefs, policies, and practices. | | | | 1 | | | | 1 | | 1 | | | | | | | |
| EDF | 5850 | Educational Leadership and Policy Studies | INTERNATL DEVLMNT ED | This course is an overview of the roles of education in national development and in promoting social, economic, and cultural improvement. Emphasis given to less developed countries and "Third World" communities at home. | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | | | | | | 1 | 1 |
| EDF | 6865 | Educational Leadership and Policy Studies | PROMOTING LITERACY IN INTL SET | This course discusses the core issues in literacy policy globally, with a particular focus on low- and middle-income countries. The course also covers the role of literacy in promoting other development outcomes, such as health and women's empowerment. | | | 1 | 1 | 1 | | | | | | | | | | | 1 | |
| EDH | 6085 | Educational Leadership and Policy Studies | SOCIAL JUSTICE IN HIGHER ED | This course explores issues surrounding various social identities, examines epistemologies that attempt to explain the role these identities play in higher education settings, and critically analyzes previous and existing higher education policy and practice to better understand the influence of social justice, diversity, and multiculturalism on higher education. | 1 | 1 | 1 | | 1 | | | 1 1 | | | 1 | | | | | 1 | 1 |
| EEL | 4280 | Electrical and Computer Engineering | RENWABLE ENRGY GEN I | This course is an introduction to renewable energy generation. Topics covered include smart grid system, hybrid electric vehicle, and grid-connected PV inverters. Emphasis is placed on the energy conversion techniques applied in the renewable energy source and energy storage elements. | | | | | | | 1 | 1 | | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|--------------------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| EEL | 5075 | Electrical and Computer Engineering | INTRODUCTION TO ENERGY STORAGE | Prerequisite: EEL 3003, EEL 3111, or graduate standing. This course provides students with an overview on energy storage technologies and devices with focus on electrochemical storages including advanced rechargeable batteries, electrochemical capacitors, and fuel cells (for storage of renewable energy sources). | | | | | | | 1 | | | | | | | | | |
| EEL | 5247 | Electrical and Computer Engineering | POWER CONVERSION AND CONTROL | This course introduces solid-state power conversion and control circuits, including analysis and design of nonlinear multiple-phase circuits with sinusoidal and non-sinusoidal variables; constant-frequency and variable-frequency input converters; variable-frequency inverters; sensing and processing circuits supporting control systems; and embedded microprocessor control systems (DC/AC conversion used with solar). | | | | | | | 1 | | | | | | | | | |
| EEL | 5284 | Electrical and Computer Engineering | PHOTOVOLTAI CS | Prerequisite: EEE 3300 or knowledge of electronics and semiconductor physics. This course educates students in the design and applications of solar energy technology. This course focuses on theoretical fundamentals of solar energy conversion, types of solar cells and their operations, optical engineering, and energy storage and distribution systems. The course covers solar energy insolation and global energy needs, current trends in photovoltaic energy engineering, solar cell material science, design and installation of solar panels for residential and industrial applications and connections to the national grid and cost analysis of the overall system. | | | | | | | 1 1 | | | 1 | | | | | | |
| EEL | 5285 | Electrical and Computer Engineering | RENEWABLE ENERGY I | This course is an introduction to renewable energy generation. Topics covered include smart grid system, hybrid electric vehicle, and grid-connected PV inverters. Emphasis is placed on the energy conversion techniques applied in the renewable energy source and energy storage elements. | | | | | | | 1 | 1 | | 1 | | | | | | |
| EEL | 5288 | Electrical and Computer Engineering | INT OF DISTRIBUTED GENERATION | This course introduces the concept of integration of alternate renewable resource based power generation technologies known as `Distributed Generation'. The course familiarizes students with various DG sources such as Wind, Solar, Hydro, Wave and Tidal, Geothermal, and Bio-fuel based energy generation technologies, however, PV and wind technologies are studied in detail. The course also covers the modeling and simulation of distribution networks, modeling of PV and wind technologies, their integration technologies with the grid, possible impacts on grid due to the integration of DG, tariffs (feed-in tariff, net-metering etc.) for DG integrations, impact of variability, microgrids and its controls, IEE interconnection standards etc. | | | | | | | 1 1 | 1 | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|------------------------------------|--|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| EES | 3040 | Civil and Environment al Engineering | INTRO TO ENVIRON ENG | This course is a broad introduction to environmental engineering topics. Includes fundamental concepts in mass balance, water quality, water and wastewater treatment, air quality, and solid/hazardous waste management, with considerations to environmental and societal impacts, as well as technical limitations. This course serves as the foundation for all other environmental engineering courses. | | | | | | 1 | | | | | 1 | | | | | |
| EML | 4450 | Mechanical Engineering | ENRG CNVR SYST SUSTA | This course presents the challenge of changing the global energy system so it addresses reducing dependence on finite fossil energy sources and moving to environmentally sustainable energy sources. The emphasis is on greenhouse gas emissions-free energy production strategies, including renewable energy sources such as solar, wind, and biomass. Topics include photovoltaic cells, fuel cells, and thermoelectric systems. | | | | | | | 1 | | | | | | | | | |
| EML | 4452 | Mechanical Engineering | SUSTAINBL PWR GENRTN | This course is a continuation of energy-conversion systems for sustainability and focuses on solar electricity, biopower, biofuels, and hydrogen as energy media. The course also explores whether hydrogen-based transportation is a practical option. | | | | | | | 1 | | | 1 | | | | | | |
| EML | 5451 | Mechanical Engineering | ENRG CNVR SYST SUSTA | This course discusses the challenges of making the global energy system independent of finite fossil-energy sources and, instead, dependent on environmentally sustainable energy sources. The course emphasizes strategies for producing energy that is free of greenhouse-gas emissions, including renewable energy sources such as solar, wind, and biomass. The course focuses on direct energy conversion and covers topics such as photovoltaic cells, fuel cells, and thermoelectric systems. | | | | | | | 1 | | | | | | | | | |
| EML | 5453 | Mechanical Engineering | SUSTAINBL PWR GENRTN | This course is a continuation of sustainability energy-conversion systems and focuses on solar electricity, biopower, biofuels, and hydrogen. The course also discusses the practicality of hydrogen- based transportation. | | | | | | | 1 | | | 1 | | | | | | |
| ENT | 2802 | Entrepreneu rship | ENTREPRE & CONTEMPORA RY SOC | This course explores entrepreneurship in society by understanding how innovation can lead to commerce and how commerce impacts our daily lives. Topics include the process of innovation, the nature of entrepreneurialism, the essence of Problem-Opportunity-Venture- Operations (POVO) model, the lean star-up business model, different kinds of entrepreneurship (commercial, social, scientific and artistic) and an introduction to competencies that have facilitated success in other entrepreneurs. | | | | | | | | 1 1 | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|----------------------|---|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| ENT | 3283 | Entrepreneu rship | MINORITY NEW VENTURE | This course focuses on the emergence and current impact of women- and minority-owned businesses. The course also considers special challenges and opportunities that women and minority entrepreneurs confront. Course may include discussions with successful women and minority business owners. | | | | | 1 | | 1 | | 1 | | | | | | | |
| ENT | 3513 | Entrepreneu rship | MARKET SOLUTIONS | This course introduces Social Entrepreneurship, a movement that uses commerce to positively impact/solve social problems. This course is designed to inform students of the world's largest social problems, how to identify social problems, and begin the ideation process in the development of social enterprise. | | | | | | | 1 | | | | | | | | | |
| ENT | 3515 | Entrepreneu rship | SE & CORPORATE RESPONSIBILIT Y | This course provides students with the historical context of Social Entrepreneurship and examines the increasing role of Corporate Social Responsibility as a strategy to improve products, profits, and brand equity. | | | | | | | 1 | | | | | | | | | |
| ENT | 3629 | Entrepreneu rship | ENTREPRENEU RIAL TECHNOLOGIE S | This course gives students the opportunity to critically assess current and emerging technologies. Students learn a defined process for efficiently and effectively coming up to speed on new technologies and how to think critically about the economic potential, societal impact, and ethical considerations of new technologies. | | | | | | | 1 | 1 | | | | | | | | |
| ENT | 4305 | Entrepreneu rship | LEGAL & ETHICAL ENVIRONMENT S | This course exposes students to the various stages of starting a businessfrom start-up and growth to an initial public offeringwhile highlighting the legal preparations and pitfalls that go along with them. Students become familiar with the essentials of leaving your job, competing with a former employer, contract law, and bankruptcy, as well as the most current issues like clean energy, e-commerce, ethics, and sustainability in the entrepreneurship environment. | | | | | | | 1 1 | | | | | | | | | |
| ENT | 4505 | Entrepreneu rship | SOCIAL ENTERPRISE FINANCE | This course introduces students to different startup capital sources, how to secure capital, how to develop a sustainable double/triple bottom line, and how to maximize social impact. | | | | | | | 1 | | | | | | | | | |
| ENT | 4514 | Entrepreneu rship | MEASURING SOCIAL IMPACT | This course introduces students to an overview of various methodologies used to evaluate the social impact generated by for- profit and nonprofit entities. Students develop a clear understanding of the four methods for measuring social impact: Expected Return; Theory of Change, Mission Alignment Methods, and Experimental and Quasi-Experimental Methods. | | | | | | | 1 | | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|----------------------|--|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| ENT | 4804 | Entrepreneu rship | PSYCHOLOGY OF ENTREPRENEU RSHIP | The psychology of entrepreneurship helps students understand the successful entrepreneur from various aspectseconomic, social, personal, and societal. This course covers various aspects of the psychology of entrepreneurship that mimics the broad research streams of psychology (e.g., cognitive, personality, and positive psychology among others). | | | | | | | | 1 | | | | | | | | | |
| ENT | 5216 | Entrepreneu rship | FOUNDATIONS OF ENTREPRENEU RSHIP AND LEADERSHIP | The objective of this course is to develop an understanding of the foundations of entrepreneurial behavior, by providing a broad survey of entrepreneurship and leadership topics. Students will be exposed to different types of entrepreneurship and the class will cover an array of topics that span from idea generation through venture formation, financing, scaling, and leading the entrepreneurial venture. At the same time, the instructor will help students build knowledge and skills to be a successful entrepreneur. | | | | | | | | 1 | 1 | | | | | | | | |
| ENT | 5606 | Entrepreneu rship | PRODUCT DEVELOPMENT ANALYTICS | The course spans the product development topics of competitive advantage, market, customer analytics, business process, financial sustainability, people and supply chain analytics. | | | | | | | | 1 | | | | | | | | | |
| ENT | 5805 | Entrepreneu rship | LEVERAGING TECHNOLOGY TO ACHIEVE SOCIAL AND SUSTAINABILIT Y GOALS | Sustainability is, at its core, the balance of environmental, social, and economic goals in a way that does a better job of taking account of future needs and risks than current social systems do. It is increasingly clear that business and environmental professionals need to understand these issues and that the investment community will be increasingly looking to identify companies that demonstrate the ability to understand, anticipate and potentially manage themselves profitably in this quickly evolving landscape. Being able to assess the broader strategy and performance of a company or organization, and particularly its approach to economic and environmental sustainability is becoming a high-profile complement to more conventional management skills. Companies have a significant impact on environmental and economic stewardship through their own activities, and by the impacts of their products and services. | | | | | | | | 1 | 1 | | | | | | | | |
| ENT | 5XXX | Entrepreneu rship | APPLIED ESG | Course is currently being developed. | | | | | | | | 1 | | | | | | | | | |
| ENT | 5XXX | Entrepreneu rship | HULT PRIZE (SPECIAL TOPICS: GLOBAL STUDENT COMPETITION) | The Hult Prize is an annual, year-long competition that crowd-sources ideas from MBA and college students after challenging them to solve a pressing social issue around topics such as food security, water access, energy, and education. In this special topics course, you will be mentored and coached to compete in a regional semi-final with the opportunity to present your social enterprise on a global stage. | | 1 | | 1 | | 1 | 1 | | | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 8 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|----------------------|---|---|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| ENT | 5XXX | Entrepreneu rship | MAP THE SYSTEM (SPECIAL TOPICS: GLOBAL STUDENT COMPETITION) | This is an opportunity for students to take their Systems Map from last semester and get it ready for Oxford's Map the System global competition. In this special topics course, you will be mentored and coached to compete in a regional semi-final with the opportunity to present your systems map on a global stage at Oxford. This is an amazing opportunity for students to learn from the world's best systems thinkers. | | | | | | | | | | | | | | | | 1 |
| ENT | 5XXX | Entrepreneu rship | MEASURING SOCIAL IMPACT | Applied Sustainable and Social Enterprises introduce students to the historical context of Social Entrepreneurship, Corporate Social Responsibility, and Environmental, Social, and Governances and examines the increasing role of Corporate Social Responsibility as a strategy to improve products, profits, and brand equity. This course analyzes numerous startups and corporate initiatives that attempt to improve and address the challenges of a changing marketplace that now demands documented sustainability practices as well as profits. The globalization of the world's marketplace, combined with increased demand by stakeholders for corporate transparency has increased the importance of social entrepreneurship and corporate social responsibility from just being a market differentiator to now being a core function of business and part of the cost of doing business in today's global marketplace. This class will examine how startups, small businesses, and corporations can incorporate environmental, social, and governances into a profitable business model. | | | | | | | | | | | | | | | | |
| ENT | 5XXX | Entrepreneu rship | MISSION ALIGNED CAPITAL | This course is being developed | | | | | | | | | | | | | | | | |
| ENT | 5XXX | Entrepreneu rship | SUSTAINABLE VALUE CHAINS IN A NET ZERO CARBON WORLD | This course will focus on sustainability of supply chains through the lens of these climate change drivers. These challenges transcend industry sectors; the course will focus on the food and agriculture industry as a microcosm for the decarbonization of supply chains. Students will learn Life Cycle Analyses through their subset Carbon Footprint of Products. We will explore the importance of value transfer through incentives and draw out critiques of treaty-based carbon markets in achieving Net-Zero by 2050. | | 1 | | | | | | | | | 1 | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|---|---|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| ENT | 5XXX | Entrepreneu rship | SYSTEMS THINKING: SOLVING WICKED PROBLEMS | What is Systems Thinking? "Systems thinking is the field of study that attempts to understand how to think better about real-world systems and the real-world problems we face." (Cabrera & Cabrera) Tackling global challenges starts with understanding a problem and its wider context. This course in systems thinking assesses system behaviors by examining the entire system— including human, political, community, resource, environmental, and social processes—to get a holistic view into how organizations and individuals often look at the world, assess problems, and design solutions. | | | | | | | | | | | | | | | | 1 |
| ENV | 4001 | Civil and Environment al Engineering | ENVIRONMENT AL ENG | This course covers the design of water and wastewater treatment plants, wastewater collection systems, air and water pollution control, as well as solid waste management and contemporary environmental issues. | | | | | | 1 | | | | | 1 | | | | | |
| ENV | 4022 | Civil and Environment al Engineering | REMEDIAITON ENGINEER | This course reviews various innovative remediation technologies used for cleanup of contaminated soil and groundwater at a site such as air sparging, soil vapor extraction, reactive walls, reactive zones, stabilization technologies, as well as hydraulic and pneumatic fracturing pump-and-treat systems. | | | | | | | | | | | 1 | | | | | |
| ENV | 4031 | Civil and Environment al Engineering | APLD ENVR ENG MCRBIO | This course surveys environmentally important microbes and their roles in the environmental restoration processes. Major topics include basics of microbiology, stoichiometry and bacterial energetics; bioremediation and other environmental microbiology applications; as well as the detoxification of hazardous chemicals. | | | | | | | | 1 | | | 1 | | | 1 | | |
| ENV | 4341 | Civil and Environment al Engineering | SOLID & HAZRDS WASTE | This course covers definitions and characteristics of solid and hazardous wastes. Topics include history, growth, and magnitude of the problem; legislative, regulatory, and technical aspects of waste generation, storage, collection, transportation, processing, transformation, and disposal; design of waste minimization and recycling programs; and case studies of waste management. | | | | | | | | 1 | | | 1 | | | | | |
| ENV | 4500 | Civil and Environment al Engineering | ENV ENG PROCESS/OPE R | This course covers the operational and design features of the physical, chemical, thermal, and biological treatments used in engineering for water and wastewater treatment and the management of solid and hazardous waste. | | | | | | 1 | | | | | 1 | | | | | |
| ENV | 4561 | Civil and Environment al Engineering | DESIGN OF WATER QUALITY MANAGEMENT FACILITIES | Prerequisite: ENV 4001. This course covers analysis of operations, processes, and systems used in the design of facilities for maintaining water supply quality, wastewater control, and aquatic pollution control. Design of small and decentralized wastewater management systems. | | | | | | 1 | | | | | 1 | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|--------------------------------------|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| ENV | 4611 | Civil and Environment al Engineering | ENVIRONMENT AL IMPACT ANALYSIS | Prerequisites: CWR 3200L and EES 3040. This course covers topics such as analysis of various measures of environmental quality, impact of human activity on water, land, and air resources, and benefit-cost analysis in environmental-impact assessment. | | | | | | 1 | 1 | | | 1 | | | | 1 | | |
| ENV | 5030 | Civil and Environment al Engineering | APPL MICROBIOLOG Y | This course focuses on the survey of environmentally important microbes and the roles they play in environmental restoration processes. Major topics include basics of microbiology, stoichiometry and bacterial energetics, bioremediation and other environmental microbiology applications, and detoxification of hazardous chemicals. | | | | | | | | 1 | | | 1 | | | 1 | | |
| ENV | 5076 | Civil and Environment al Engineering | ENVIRON LAW FOR ENG | This course is an introduction to environmental law and policy suitable for students pursuing engineering and science majors. The course addresses major federal environmental laws and environmental permitting and develops critical thinking skills through the exploration of contemporary and sometimes controversial issues such as climate change, environmental justice, hydraulic fracturing, trade, and the environment, and international environmental law. | | | | | | | 1 | | 1 | | 1 | 1 | | | 1 | |
| ENV | 5105 | Civil and Environment al Engineering | AIR POLLUT CONTROL | This course investigates analytical concepts for determination of sources, amounts, and transport of air pollutants; health and environmental effects; design of control devices and management programs. | | | 1 | | | | | | | | 1 | | | | | |
| ENV | 5407 | Civil and Environment al Engineering | WATER REUSE ENGINEERING | Prerequisite: ENV 4001 or equivalent. This course covers wastewater reclamation and reuse; treatment processor and systems; monitoring and control instrumentation; health and social aspects; design of facilities/systems. | | | 1 | | | 1 | | | | | | | | | | |
| ENV | 5565 | Civil and Environment al Engineering | DESIGN WATR QUAL FAC | This course is an analysis of operations, processes, and systems used in the design of facilities for maintaining water supply quality, wastewater control, and aquatic pollution control. Design of wastewater collection systems, water and wastewater treatment plants, and systems for disposal for residuals from such facilities. | | | | | | 1 | | | | | 1 | | | | | |
| ENV | 5615 | Civil and Environment al Engineering | ENVIRONMENT AL IMPACT ANALYSIS | Prerequisites: CWR 3200L and EES 3040. This course is an analysis of various measures of environmental quality. Impacts on different types of resources. Benefit-cost in environment impact assessment. | | | | | | | 1 | | | | | | | | | |
| ENV | 5617 | Civil and Environment al Engineering | ENVIRO ENGIN SUSTAINABILIT Y | This course explores theory in the field of environmental sustainability and green engineering: material also covers sustainability in relation to other disciplines, but focuses on environmental and engineering concepts. | | | | | | | | 1 | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 1 | 0 1 | 1: | 13 | 3 14 | 15 | 16 | 17 |
|---------|--------|--|-----------------------------------|--|---|---|---|---|---|---|-----|-----|---|-----|----|----|------|----|----|----|
| EOC | 4631 | Earth, Ocean, and Atmospheric Science | MARINE POLLUTION | This course introduces students to chemical, physical, and biological aspects of dominant marine pollutants, including dissolved toxic metals, complex organic and inorganic contaminants, and particulate pollutants. Topics cover the sources and types of dominant contaminants, their key characteristics, their pathways (as traced through the marine ecosystem from the source to the sinks), their impact on the environment, as well as approaches that could lead to the reduction or elimination of pollutants in the marine environment. | | | | | | | | | | | | 1 | 1 | | | |
| ESC | 1000 | Earth, Ocean, and Atmospheric Science | INTRODUCTOR Y EARTH SCIENCE | This course is an introduction to the study of planet Earth, its internal dynamics, and surficial weathering, erosion, sedimentary processes, the composition and motion of its oceans and atmosphere, and its origin as part of the solar system. Course credit may not be received for this course and also GLY 1000, GLY 1030 or GLY 2010C. | | | | | | | | | | | | | | 1 | | |
| ESC | 3100C | Earth, Ocean, and Atmospheric Science | HISTORY OF EARTH SYSTEMS | This course examines the history of the earth, its tectonic, chemical and biological systems, and how they influence one another. Special attention is given to important tectonic, environmental and biological events. | | | | | | | | | | | | | | 1 | | |
| EVR | 1001 | Earth, Ocean, and Atmospheric Science | INTRO ENV SCIENCE | This course is an introduction to environmental science that covers the basic functioning of the earth's environmental system and human effects on that system. | | | | | | | | | | | | 1 | | 1 | | |
| GEA | 1000 | Geography | WORLD GEOGRAPHY | This course is a regional survey of the human occupation of the face of the earth, local cultures, political systems, and development problems. | | | | | | | | | | 1 | | | | 1 | 1 | |
| GEO | 1330 | Geography | ENVIRONMENT AL SCIENCE | This course explores the causes of local and global environmental problems and their impacts, including resource use, pollution, ecosystems, and population growth. | | | | | | | | | | 1 | 1 | | | 1 | | |
| GEO | 1400 | Geography | HUMAN GEOGRAPHY | This course is an introductory survey of geographic theories, issues and applications from the human perspective. The course discusses how people interact with each other politically, economically, culturally and socially across distances, scales and within various physical environments. In addition, global contrasts are examined using urban versus rural habitation, local versus transnational trade, and uneven economic development. | | | | | | | | | | 1 | | | | | | |
| GEO | 3502 | Geography | ECONOMIC GEOGRAPHY | This course examines the geography of economic activity at local, national, and global scales: historical development of capitalism, regional development, spatial structure of agriculture, manufacturing and services, the global economy, third world poverty, and population growth. | 1 | 1 | | | | | | 1 | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------|--------------------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| GEO | 4114 | Geography | ENV FIELD METHODS | This course focuses on the design and implementation of a field- based project employing field sampling, GIS, GPS, and exploratory statistical methods. | | | | | | | | | | | | | | 1 | | |
| GEO | 4210 | Geography | LANDFORMS & LANDSCAPES | This course is on the spatial distribution of geomorphic landforms across landscapes: how they form, how they change over time, how they are designated, and their nomenclature. Emphasis is given to how humans interact with these landscapes and how these landscapes can impact human habitation. | | | | | | | | | | 1 | | | | 1 | | |
| GEO | 4251 | Geography | CLIMATE CHANGE AND STORMS | This course explores the critical debate on global climatic fluctuations and extreme weather frequency in relation to human impact and interference. Particular focus is given to geographic variations and temporal validity. | | | | | | | | | | | | 1 | | | | |
| GEO | 4280 | Geography | WATER RESOURCES | This course provides students with a comprehensive overview of the natural processes associated with water occurrence and resources. Focus is given to water's unique properties, how it occurs and moves through Earth's environment; how it impacts human habitation, and its future as a critical and valuable natural resource. Development of socio-economic concepts of management, supply, use, reclamation, and sustainability are also emphasized. | | | | | | 1 | 1 | | | 1 | 1 | | | | | |
| GEO | 4300 | Geography | BIOGEOGRAPH Y | This course examines the spatial distributions of flora and fauna, ecosystem change, and human interventions such as logging, invasive species, and wilderness preservation. | | | | | | | | | | | 1 | | | 1 | | |
| GEO | 4340 | Geography | LVNG IN HAZD ENVIRON | This course explores types of environmental hazards (natural and human-made) and their effects, techniques for the analysis of risks, and strategies for recovering losses. | | | | | | | | | | 1 | | | | | | |
| GEO | 4344 | Geography | ENVIRON DISASTERS & APOCALYPSE | This course covers theoretical debates on climate change and the Anthropocene, linking them to cinematic and cultural tropes of disaster and apocalypse. Students explore how anthropogenic climate change is being shaped by the actions of humans who have solely contributed to the massive build-up of carbon dioxide in the atmosphere since industrialization; the increased amounts of radioactivity in the layers of earth and ice; and repercussions from overpopulation. | | | | | | | | | | 1 | 1 | 1 | | 1 | | |
| GEO | 4355 | Geography | GEOGRAPHY: FOOD & ENVIRONMENT | This course explores food production, distribution and consumption by intensive global agro-food and local organic farm operations, and their impacts on environmental sustainability. | | 1 | | | | | 1 | | | | | | | | | |
| GEO | 4357 | Geography | ENV CONFLICT & ECON | This course examines controversies over the use, transformation, and destruction of nature, including political ecology. | | | | | | | 1 | | | | | 1 | 1 | 1 | 1 | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------|----------------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| GEO | 4376 | Geography | LANDSCAPE ECOLOGY | This course offers a review of methods on analyzing geographic patterns of natural phenomena, including ecological conservation, natural resource management, landscape and urban planning, as well as human-environmental interactions and implications. Familiarity with software packages such as ArcGIS is assumed. | | | | | | | | | | 1 | 1 | | | 1 | | |
| GEO | 4392 | Geography | GEOG. MARINE CONSERVATIO N | This course outlines the major conservation issues in coastal and marine systems worldwide, including the science, management and policy dimensions of marine conservation. The course explores critical conservation problems facing marine ecosystems; and at the same time explores their causes and threats from climate change, overfishing, and other types of natural resource extraction and management failures. Students explore solutions, both science-based, and social science-based (particularly economics, management and policy implementation). | | | | | | | 1 | | | | 1 | 1 | 1 | | 1 | |
| GEO | 4404 | Geography | BLACK GEOGRAPHIES | This course addresses the historical, political, and spatial contexts in which geographies of black populations emerge throughout the United States and beyond. The course seeks to investigate ways in which black communities throughout the African Diaspora are spatially marginalized, and the ways in which Black communities produce space. The course discusses race, racism, alongside conversations of spatial marginalization (e.g. segregation). | | | | | | | | | 1 | 1 | | | | | | |
| GEO | 4412 | Geography | ENVIRONMENT AND GENDER | In this course, students look at how physical space (be it national boundaries or public parks) and the terrain of the symbolic realm are sometimes at odds. Included in this investigation is the examination of how ideas of gender, place and space affect individuals' experiences and how said experiences are created and limited by ideas of space at various geographical scales and contrasts between more and less economically developed nations. | 1 | | | | 1 | | | | | 1 | | | | | | |
| GEO | 4421 | Geography | CULTURAL GEOGRAPHY | This course studies the processes by which various cultural features have diffused throughout the world. Emphasis is on the contemporary cultural landscape. | | | | | | | | | | 1 | | | | | | |
| GEO | 4450 | Geography | MEDICAL GEOGRAPHY | This course applies geographical concepts and techniques to health- related problems, including the ecology of health, disease diffusion, medical cartography, and health care access. | | | 1 | | | | | | | | | | | 1 | | |
| GEO | 4471 | Geography | POLITICAL GEOGRAPHY | This course focuses on the spatial dimensions of political processes from the local to the global level, including elections and geopolitics of the world system. | | | | | | | | | | | | | | | 1 | |
| GEO | 4503 | Geography | GLOBALIZATIO N | This course explores the concepts and processes that define a world system of commodity production, labor costs, and cultural exchange. | | | | | | | 1 | | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------|----------------------------------|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| GEO | 4602 | Geography | URBAN GEOGRAPHY | This course explores the historical growth of cities; spatial structure of commercial, industrial, and public facilities within cities; residential segregation; urban poverty and fiscal distress, and urbanization in the third world. | 1 | | | | | | | | 1 | 1 | | | | | | |
| GEO | 4700 | Geography | TRANSPORT GEOGRAPHY | This course offers a review of the literature and techniques for the spatial impacts of transportation systems, including functionality, and their role on society, the economy, energy, the environment, and sustainability. | | | | | | | 1 1 | | | 1 | | 1 | | 1 | | |
| GEO | 5305 | Geography | BIOGEOGRAPH Y | This course examines the spatial distributions of flora and fauna, vegetation dynamics, ecosystem change and issues related to biodiversity, invasive species, wildfire policy and debates over wilderness. | | | | | | | | | | | | | | 1 | 1 | |
| GEO | 5358 | Geography | ENV CONFLICT & ECON | This course examines controversies over the use, transformation, and destruction of nature, including political ecology. | | | | | | | 1 | | | | | 1 | 1 | 1 | 1 | |
| GEO | 5378 | Geography | LANDSCAPE ECOLOGY | This course offers a review of methods on analyzing geographic patterns of natural phenomena, including ecological conservation, natural resource management, landscape and urban planning, as well as human-environmental interaction and implications. Familiarity with software packages such as ArcGIS is assumed. | | | | | | | | | | 1 | 1 | | | 1 | | |
| GEO | 5393 | Geography | GEOG. MARINE CONSERVATIO N | This course develops the major conservation issues in coastal and marine systems worldwide, including the science, management and policy dimensions of marine conservation. The course explores critical conservation problems facing marine ecosystems; and at the same time evaluate their causes and threats from climate change, overfishing, and other types of natural resource extraction and management failures. The course discusses solutions, both science- based, and social science-based (particularly economics, management and policy implementation). | | | | | | | 1 | | | | 1 | 1 | 1 | | 1 | |
| GEO | 5406 | Geography | BLACK GEOGRAPHIES | This course builds on the historical, political, and spatial contexts in which geographies of black populations emerge and are perpetuated across the United States and elsewhere. The course reaffirms discourse in which Black communities throughout the African Diaspora are continually marginalized spatially, and the ways in which black communities themselves produce geographic space. It will provide a forum for discussion on race, racism, as well as spatial marginalization/ segregation. | | | | | | | | | 1 | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------|-----------------------------|--|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| GEO | 5417 | Geography | RACE AND PLACE | This course integrates various concepts and topics concerned with the spatial construction and effects of race and ethnicity, including identity, segregation, political and cultural landscapes, and environmental justice. | | | | | | | | | 1 | 1 | | | | | | |
| GEO | 5451 | Geography | MEDICAL GEOGRAPHY | This course reviews the literature and techniques for locating, accessing, and understanding public health evidence, as well as evaluating environmental hazards that pose risks to human health and safety and policy repercussions to public health provisions. | | | 1 | | | | | | | | | | | | | |
| GEO | 5453 | Geography | GLOBAL HEALTH | This course explores and evaluates public health problems and examines global health inequality. | | | 1 | | | | | | 1 | | | | | | | |
| GEO | 5545 | Geography | ADV ECO GEOGRAPHY | This course is an in-depth examination of several themes in the analysis of economic landscapes, including input-output analysis, historical materialism, post-Fordism, services and telecommunications, and the global economy. | | | | | | | | 1 | | | | | | | | 1 |
| GEO | 5704 | Geography | TRANSPORT GEOGRAPHY | This course offers a review of the literature and techniques for the spatial impacts of transportation systems, including functionality, and their role on society, the economy, energy, the environment, and sustainability. | | | | | | | 1 | | | 1 | | | | | | |
| GEO | 2200C | Geography | PHYSICAL GEOGRAPHY | This course is an overview of earth-sun relations, weather, climate, landforms, water systems, soils, and vegetation. | | | | | | | | | | | | 1 | 1 | 1 | | |
| GIS | 4330 | Geography | FLORIDA GIS APPLICATIONS | This course is an evaluation of the breadth of environmental and social applications of geographic information systems specific to the State of Florida. | | | | | | | | 1 | | 1 | | 1 | 1 | 1 | | |
| GIS | 4421 | Geography | GIS & HEALTH | In this course, students use a suite of computer-based tools called geographic information systems to apply geographic theory to public health questions, such as where diseases are located, how places affect our well-being, and what geographic tools can be used to understand global health epidemics. The course is held in a GIS computer lab, where data on health is analyzed and applications in health and medicine are discussed as ongoing challenges in data collection related to issues of surveillance and privacy. | | | 1 | | | | | 1 | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|---------------------------------|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| GIS | 5305 | Geography | GIS ENVIRONMENT AL | In this course, technical topics covered include space-time variability in environmental data, environmental data acquisition and integration, interpolating environmental data, error and uncertainty, environmental decision support systems, environmental modeling techniques, and the integration of geospatial technologies with environmental modeling systems. Applications include hydrological modeling, terrain modeling and landform analysis, landscape pattern analysis, land suitability analysis, soil erosion modeling and wildfire modeling. | | | | | | | | 1 | | | | 1 | | 1 | | |
| GIS | 5318 | Geography | CLIMATE CHANGE ECOSYSTEMS | This course uses geographic information systems (GIS) to handle and map evidence for shifts in ecosystem responses to climate change. The course taps into the debate on climate change with well documented evidence to support the acceleration of global climatic alterations. The course demonstrates evidence such as consistent patterns of ecological responses including directional shifts in phenology and species distributions have important consequences for population dynamics, species coexistence, and widespread impacts on human and natural systems. | | | | | | | | 1 | | | | 1 | | 1 | | |
| GIS | 5400 | Geography | GIS SOCIAL SCIENCES | In this course practical examples from the fields of health, economic geography and real estate, housing, transportation, criminology and others are used to illustrate how spatial analysis techniques are used to address problems in a GIS environment. Special consideration is given to the data needs of such operations, the implementation of methods in a GIS environment, and understanding the spatial assumptions and issues that underpin analyses. | | | | | | | 1 | | | 1 | | | | | 1 | |
| GLY | 1030 | Earth, Ocean, and Atmospheric Science | ENVIR ISSUES IN GLY | This course examines environmental issues as they relate to geological phenomena, which include volcanic and earthquake hazards, resource and land-use planning, air and water pollution, waste disposal, glaciation and sea-level change, landslides, flooding, shoreline erosion, and global change issues. Course credit may not be received for this course and also GLY 1000 or 2010C. Credit can be received for taking GLY 1000L. | | | | | | | | | | | | 1 | 1 | 1 | | |
| GLY | 3039 | Earth, Ocean, and Atmospheric Science | ENERGY | This course examines the origin of our energy and mineral resources (e.g., fossil fuels, uranium, hydrogen), their global supply, and the environmental impacts of extracting and utilizing these resources. Emphasis is placed on the chemical nature of the resources and the impact on the chemical composition of the ocean/atmosphere and the global heat budget. Field trips, in-class demonstrations, and homework exercises provide firsthand experience. | | | | | | | 1 | | | | 1 | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|---------------------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| GLY | 4721 | Earth, Ocean, and Atmospheric Science | HYDROGEOLO GY AND FIELD METHODS | This course introduces the fundamental principles of groundwater flow and solute transport in aquifers and the interactions between groundwater and the environment. The course also introduces field methods essential for studying groundwater in field conditions. | | | | | | | | | | | | | 1 | 1 | | |
| GLY | 5267 | Earth, Ocean, and Atmospheric Science | STABLE ISOTOPE TRCRS | This course is an introduction to the basic principles of stable isotope geochemistry. The application of stable isotopes to geochemical, hydrological, and ecological problems. | | | | | | | | | | | | 1 | | 1 | | |
| GLY | 5575 | Earth, Ocean, and Atmospheric Science | COASTAL GEOLOGY | In this course, topics include sedimentologic processes operating along modern coasts, erosion and deposition, shoreline evolution, effects of sea-level and climate change on shorelines, coastal morphodynamics, responses to critical erosion, and sediment transport. | | | | | | | | | | | | 1 | 1 | | | |
| GLY | 5828 | Earth, Ocean, and Atmospheric Science | HYDROGEOLO GY AND FIELD METHODS | This course introduces the fundamental principles of groundwater flow and solute transport in aquifers and the interactions between groundwater and the environment. The course also introduces field methods essential for studying groundwater in field conditions. | | | | | | | | | | | | 1 | 1 | | | |
| GLY | 5885 | Earth, Ocean, and Atmospheric Science | GEO HAZARDS ASSESMNT | This course is designed as an overview for understanding the geologic perspective in assessing environmental hazards. Topics covered include: beach processes and erosional effects of severe storms, evaluation of flood-prone and wetland areas, evolution of sinkholes, landfill sitings and remediation, mine reclamation problems, contaminant transport and contamination plumes, nuclear waste disposal, slope stability issues, etc. | | | | | | | | | | | | 1 | | 1 | | |
| HFT | 2716 | Hospitality | INTL TRAVEL & CULTUR | This course introduces students to contemporary tourism through a geographical and multicultural perspective of worldwide travel. The course emphasizes the most popular travel destinations and provides information about the physical and cultural characteristics of major cities, states, and countries. The course offers basic facts about travel destinations, the environment , and the people of many regions around the world, and it presents the nature of cultural diversity reflecting both Western and non-Western cultures with special emphasis on ethnic background, race, religion, values, tradition, language, material goods, and inter-relationships among local cultures. | | | | | | | | | | 1 | | | | | | |
| HFT | 3700 | Hospitality | TOURISM AND ENVIRONM | This course focuses on tourism management, organization, and development. Emphasis on economic and environmental issues confronting the industry such as balancing use and preservation. Open to nonmajors. | | | | | | | 1 | | | | | 1 | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-------------|---|---|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| HFT | 4104 | Hospitality | GLOBAL IMPACTS AND SUS | This course is designed to provide the student with an in-depth understanding and appreciation for sustainable business practices within the private club and golf resort industry. Focus is placed on how existing companies operate within the sustainability model. Students are expected to generate discussions and ideas on how the industry will impact local, regional, and global communities in the future. Case studies are utilized to provide students with real world examples of current practices. | 1 | | | | | | 1 | | | | 1 | | | | 1 | |
| HFT | 4253 | Hospitality | LODGING MANAGEMENT | This course examines the management of the rooms departments, food & beverage departments, other profit centers and staff functions; hotel sustainability, and hospitality ethics. | 1 | | | | | | 1 | | | | 1 | | | | 1 | |
| HIS | 4086 | History | PRESERVING HISTORIC SITES AND SPACES | This course focuses on the identification, preservation, and maintenance of historic sites; the historic preservation movement. The course does not count as credit toward the history major. | | | | | | | | | | | | | | | 1 | |
| HIS | 5083 | History | PRESERVING HISTORIC SITES AND SPACES | This course focuses on the identification, preservation, and maintenance of historic sites; the historic preservation movement. | | | | | | | | | | | | | | | 1 | |
| HIS | 6934 | History | SPECIAL TOPICS IN HISTORY: ENVIRONMENT AL HISTORY IN EAST ASIA, 19TH CENTURY TO THE PRESENT | Graduate level course offered every 2-3 years. | | | | | | | | | | | | 1 | | | 1 | |
| HUM | 2937 | English | SUSTAINABLE PUBLIC DISCOURSE | Known alternatively as "ecospeak," "popular science," and "science- based CSR," the phenomenon of moving scientific facts into the public sphere is one that deserves our critical attention. Literally speaking, we will examine academic and real-world genres that advocate for sustainability and analyze the principles Underlying their construction and reception. Figuratively speaking, we will consider specific paradigms in written communication that perpetuate, devolve, or recycle themselves over time. We will focus our study in three different spheresscientific and technical writing, environmental rhetoric and public policy, and daily persuasion and propaganda. | | | | | | | | | | | | 1 | | | 1 | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|---|---|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| HUN | 2125 | Nutrition, Food and Exercise Sciences | FOOD AND SOCIETY | This course examines the impact of society on human food ways, role of food and nutrition in national development and global politics. For nonmajors. | | 1 | | | | | | | | | | | | | 1 | |
| IDH | 2117 | Sociology/Int erdisciplinar y Studies | SOCIAL (IN)EQUALITIES | This course explores the structures and institutions of social inequality along the intersectional axes of class, race, and gender/sexuality by focusing on how these categories are socially constructed, maintained, and experienced. | | | | | 1 | | | | 1 | | | | | | | |
| IDH | 2403 | Social Science | DOMESTIC, FACTORY, AND SEX WORK: FEMINIST PERSPECTIVES ON GLOBALIZATIO N | By focusing on the roles that domestic workers, factory workers, and sex workers play within the global economy, this course engages feminist debates about the ethics of globalization, the challenges of transnational activism, and the potential complicities of U.S. citizens in maintaining global structures of inequality. | | | | | 1 | | | 1 | 1 | | | | | | | |
| IDS | 2165 | Managemen t | WRITING FOR GREEN EVERYWHERE | This course examines the intersections between communication, business, intercultural business, sustainability, social responsibility, ethics, and professional leadership. One facet of the course explores the communication issues and challenges that managers of businesses and other organizations face. Additionally, the course discusses sustainability issues through the lens of Permaculture and Transition Town philosophies, tackling topics such as "peak oil," permaculture design, local and alternative currencies, and the "triple bottom line" ideal; these topics are also examined via a global perspective. | | | | 1 | 1 | | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |
| IDS | 2227 | Geography | SUSTAINABLE SOCIETY | This course provides students with the opportunity to observe and inquire about sustainable practices through field studies at local organic farms, hydro-power stations, new urbanism community, and recycling facilities, etc., as well as through interactions with community-based programs. Students will engage in critical thinking about the sustainability of human society and the environment from various aspects, which include producers, consumers, public-service sectors, and policy makers. | | | | | | | | | | 1 | 1 | 1 | | | | |
| IDS | 2240 | Earth, Ocean, and Atmospheric Science | SUSTAINABLE FOOD & WATER | This course provides an overview of the issues involved in food and water security on a planet where a billion people are malnourished, while at the same time another billion are overweight. The course examines the science and sustainability of food production, water quality, and soil development. | | 1 | | | | 1 | | | | | 1 | | | 1 | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|---|---|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| IDS | 2323 | Sociology/Int erdisciplinar y Studies | GENDERED BODIES OVER THE LIFE COURSE | This course examines how gender – as it is embedded in individual, interactional, and institutional dimensions of society – gets woven into experiences of our bodies over the entire life course. | | | | | 1 | | | | | | | | | | | |
| IDS | 2470 | Biological Science | THE ECOLOGY OF FOOD | This course explores the basic ecology of agriculture and fisheries and considers how conventional and alternative food-production practices generate and solve ecological problems. The course focuses on several major current issues (e.g. genetically modified organisms, pollinator declines, organic agriculture, and fisheries), and for each student learn the science behind the issue and the social forces shaping the problem. Students also learn through discussions of scientific and popular writings, lectures, hands-on and written projects, oral presentations, local speakers and field trips. | | 1 | | | | | | | | | | | | | | |
| IDS | 2473 | Geography | FIELD METHODS | This course addresses scientific research design and field data collection, drawing on principles in biogeography and ecology. Students focus on sampling design and survey methods for plants on three scales: populations, communities, and ecosystems. Students also gain insight into field-based inquiry and techniques to monitor and assess plant populations, communities, and ecosystems. | | | | | | | | | | | | | | 1 | | |
| IDS | 2490 | Communicat ion | COM AND SOCIAL RESPONSIBILIT Y | This course is for students living in the social justice living learning community. It acquaints students with the principles of communication and the role it plays in social justice movements. | | | | 1 | 1 | | | I | 1 | | | | | | 1 | |
| IDS | 3137 | Sociology/Int erdisciplinar y Studies | POLITICS OF REPRODUCTIO N | This course is an introduction to studying the social and political dimensions of human reproduction. In each class, students address historical context, sociopolitical trends, and contemporary debates regarding specific themes and topics related to reproductive politics. Course material and discussions draw from varied perspectives and interdisciplinary resources, including sociology, demography, anthropology, history, medicine, and public health. | | | 1 | | 1 | | | | | | | | | | 1 | |
| IDS | 3164 | Communicat ion | MEDIA, CULTR & ENVIRONMENT | This course examines the role of language and representation in our understanding of the natural world. The course examines news media coverage of environmental issues, environmental images in popular culture as well as the communication strategies of environmental organizations. | | | | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|--|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| IDS | 3169 | Art | ART AND THE ENVIRONMENT | This course provides an introduction into the theories and creative processes that propel environmental art and design. Students explore a wide range of creative media, methods, and themes used by visual artists and designers that address the environment. By analyzing, discussing and writing about environmental art and design, students develop an enhanced awareness of the complexities faced globally and gather perspectives on the ways artists attempt to affect change. | | | | | | | | | | 1 | | | | | | |
| IDS | 3342 | Sociology/Int erdisciplinar y Studies | BOOMERS AND MILLENNIALS: CHANGING GENERATIONS | In this course, students are guided through original empirical research to appreciate the sources of changes across contrasting generations, and to follow up the impact of generational change for a wide range of social, economic and political dimensions of everyday life. Research projects compare different generations at equivalent points in the life cycle. | | | 1 | | | | | | 1 | 1 | | | | | | |
| IDS | 3430 | Sociology/Int erdisciplinar y Studies | SOCIOLOGY OF HIP HOP CULTURE | This course challenges students to examine themes and messages expressed within the subculture of Hip Hop through the application of major sociological perspectives and theories. The course also examines the reciprocal relationship between Hip Hop culture and the broader American society, through engagement with scholarly literature, examination of empirical evidence and execution of student research projects. | | | | | | | | | | 1 | | | | | | |
| IDS | 3433 | Sociology/Int erdisciplinar y Studies | MODERN DEATH AND DYING | Death and dying are fundamental to discussions about social positions and processes, and they reflect who we are and inform how we function as a society. This course is an introduction to studying the social and ethical dimensions of death in the modern world. In each class, we will address historical context, medical and technological trends, and contemporary debates regarding specific themes and topics related to death. | | | 1 | | | | | | | | | | | | | |
| IDS | 3495 | Sport Managemen t | SPORT: CONSCIENCE COMMERCE | The course will use philosophical perspectives to critically analyze segments of the sport industry through ethical and socially responsible lenses. The course focuses on the decision-making process across sport sectors and positions. | | | | | 1 | | | | 1 | 1 | | | | | 1 | |
| IDS | 2332r | Sociology/Int erdisciplinar y Studies | SEXUAL HEALTH AND THE MODERN WORLD | This course analyzes and synthesizes information centering on a number of current sexual and reproductive health issues. Course materials include the interdisciplinary theorizing of feminists, medical social scientists, anthropologists, demographers, and public health scholars. | | | 1 | | 1 | | | | 1 | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| IHS | 3931 | Health Sci Interdisciplin ary | PROBLEMS AND ISSUES IN HEALTHCARE | In this course, students build upon experiential learning opportunities and further their understanding of key issues facing healthcare, patients, providers, institutions, and communities by examining and reading scholarly works. Assignments and activities help students to identify and generate content (through research or hands-on experiences that emphasize a breadth or depth of knowledge in the field) to serve as the foundation for future research on a problem or issue in healthcare. | | | 1 | | | | | | | | | | | | | |
| IHS | 4120 | Health Sci Interdisciplin ary | FRONTIERS IN MEDICINE | This course aims to provide advanced undergraduate students the opportunity to gain an understanding of common human disease conditions through a highly interactive set of learning activities. We recommend that students have taken physiology, genetics and biochemistry. Examples of topics covered include heart failure, cancer, diabetes, depression and Alzheimer's disease. | | | 1 | | | | | | | | | | | | | |
| IHS | 4123 | Health Sci Interdisciplin ary | NARRATIVE MEDICINE: PATIENT- CENTERED CARE AND THE INDIVIDUAL STORY | In this course, students learn the tenets of narrative medicine and explore the role of narrative in improving clinician understanding of the individual patient's unique experience. To build narrative skill, students analyze and interpret various illness experiences as depicted in select stories, poems, and non-fiction medical narratives. Students also expand their understanding of narrative medicine and what it means to practice patient-centered care through various analytical and reflective writing assignments. | | | 1 | | | | | | | | | | | | | |
| IHS | 4210 | Health Sci Interdisciplin ary | FUTURE HEALTHCARE CHALLENGES | In this course students will explore a set of challenges that will alter the environment they will step into as future healthcare providers. These challenges include a rapidly aging society, the impact of big data, global warming, changes in health care delivery systems, and the ethical implications of new technologies—to name just a few. Discussions generated from selected readings are intended to assist students form their own rational approach to the analysis of complex societal issues affecting their chosen profession. | | | 1 | | | | | 1 | | | | 1 | | | | |
| IND | 2219 | Interior Architecture and Design | DESIGN & THE HUMAN EXPERIENC | This course focuses on the impact of design on the human experience. It is a gateway experience in which students will explore the nature of design, creativity, and problem-solving. The course will introduce some of the major theories from the design disciplines of interiors, architecture, landscape architecture, and products design, and provide students with an awareness, understanding, and enthusiasm for design and its impact on our lives. | | | | | | | | | | 1 | | | | | | |
| IND | 3431 | Interior Architecture and Design | LIGHTING FUNDAMENTAL S | This course explores the advanced technical aspects of interior design with emphasis on lighting, electrical plans, reflected ceiling plans, measurements, and acoustics. References sustainability principles in projects and content. | | | | | | | | | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|----------------------------|--|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| IND | 3480 | Interior Architecture and Design | MATERIALS AND METHODS | References sustainability principles in projects and content. | | | | | | | | | | | 1 | | | | | |
| IND | 3627 | Interior Architecture and Design | SUSTAINABLE DESIGN | This course gives students a basic introduction to the fundamentals of sustainable design in order to better understand the inter-relationships between the built environment and nature. | | | | | | | | | | 1 | 1 | | | | | |
| IND | 5479 | Interior Architecture and Design | CONSTRUCTIO N SYSTEMS | This lecture course focuses on general construction techniques, terminology and sustainability. Integration of the building systems of structure, plumbing, mechanical and fire safety is emphasized. | | | | | | | | | | 1 | | | | | | |
| IND | 5628 | Interior Architecture and Design | SUSTAINABLE DESIGN | This course gives students a basic introduction to the fundamentals of sustainable design in order to better understand the interrelationships between the built environment and nature. | | | | | | | | | | 1 | 1 | | | | | |
| IND | 4243C | Interior Architecture and Design | STUDIO IV | This course is an advanced application of the design process with emphasis on individual professional objectives and procedures for portfolio presentation. References sustainability principles in projects and content. | | | | | | | | | | 1 | | | | | | |
| INR | 4011 | International Affairs | POLIT GLOBALIZATIO N | This course examines economic globalization: what it is, who is harmed and helped by it, how countries and citizens respond to it, and what the future might hold. The course focuses heavily on economic issues but assumes no background in the subject. | | | | | | | | | | | | | | | | 1 |
| INS | 2912 | International Affairs | GLOBAL CITIZENSHIP | This course is the final required class for the Global Citizenship Certificate. The course increases students' global competencies by utilizing theories and concepts learned during the Global Perspectives course and applies those to higher-level critical thinking and research. The course explores topics relevant to today's global society such as extreme poverty and inequality, international trade, political cooperation, climate change, race, and ethnicity and gender. | 1 | | | | | | | | 1 | | | 1 | | | | 1 |
| ISS | 2937 | Geography | ENVIRONMENT AL JUSTICE | HONORS - This course engages with the history, core concepts, and effects of the environmental justice movement, examining how race and class interact to produce and sustain environmental inequities. Foundationally, it approaches environmental issues from a lens attentive to issues of social justice. Course materials highlight the need to address thorny environmental issues and their long-term consequences including the disproportionate burdening of historically marginalized communities with debilitation, displacement, and death. | | | | | | | | | 1 | | | 1 | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|--------------------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| ISS | 2937 | Social Science | YOUTH SUBCULTURES | What is the role of youth subculture in challenging and reproducing structures of inequality? We will address this question by examining how youth subcultures are embedded within their particular sociohistorical contexts, indexing not only intergenerational differences but also changing race, gender, sexuality, and class relations. | | | | | | | | | 1 | | | | | | | |
| ISS | 3241 | Social Science | FOUNDATIONS OF SOC ENT & INNOV | This course provides a comprehensive overview of the emerging field of social entrepreneurship and innovation, examining how it promotes innovative, impactful, and sustainable solutions to social and environmental problems at the local, national, and international levels. The course looks at how the field is defined and expressed in three essential contexts: innovation and impact across the public, private, and citizen sectors; social enterprise within the context of nonprofit, for-profit, and hybrid organizations; and social transformation throughout an entire system. | | | | | | | | 1 | | | | | | | | 1 |
| ISS | 4312 | Social Science | LEADING SOC ENTERPRISE & INNOV | This course provides a framework for students to apply Social Innovation & Entrepreneurship theory and methods toward a social/environmental problem they're interested in. Through the course, students: work to better understand the problem, stakeholder perspectives, and the effective and ineffective ways the problem is currently being addressed; frame a design challenge, identify existing innovative models that can inspire their own, ideate potential approaches to the problem, and develop a sustainable and scalable social impact model that systemically addresses the problem (or an aspect of it); prototype the model; create and present a plan for its implementation via a hybrid social enterprise. | | | | | | | | 1 | | | | | | | | |
| JPT | 3512 | Modern Languages and Linguistics | CONTEMPORA RY JAPANESE CULTURE | This course investigates contemporary developments in Japanese culture, focusing on features both that are particular to Japan and that tie Japan to global culture. Students explore the connections between various forms of cultural production and social interaction and other social, political, and economic institutions in Japan, as well as the relationship between new technologies and markets and the global exchange of cultural forms and social ideas. May be repeated to a maximum of nine semester hours. | | | | | 1 | | 1 1 | | 1 | 1 | | | | | 1 | 1 |
| LAW | 6460 | Law | LAND USE REGULATION | This course is a study of land use and regulation, including zoning, public acquisition, various innovative land use controls, subdivision controls, growth management, wetlands and shorelands controls, and a discussion of the relationship between energy and land use. | | | | | | | 1 | | | 1 | | | | 1 | 1 | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| LAW | 6470 | Law | ENVIRONMENT AL LAW | This course is a survey of environmental rights, remedies, and policy, with emphasis on the common law, background, the administrative overlay, and federal legislation, including NEPA, Clean Air Act, Water Pollution Control Act, Noise Control Act, and Toxic Substances Control Act. | | | | | | 1 | | | | | 1 | 1 | | | | 1 | |
| LAW | 6480 | Law | NATURAL RESOURCE LAW | This course is a survey of natural resources law, emphasizing water resources management and pollution control, wetlands regulation, and wildlife law. May be repeated up to a maximum of five semester hours. | | | | | | 1 | | | | | | | | | 1 | 1 | |
| LAW | 6555 | Law | LAW & ECONOMICS | This course is an introduction to basic microeconomic principles necessary for lawyers to understand economic analysis as used in the legal literature and to use and evaluate legal arguments that rely on economic analysis. | | | | | | | | 1 | | | | | | | | 1 | |
| LAW | 7262 | Law | INTERNATIONA L TRADE | This course is an advanced study of the law and policy of international trade and economic integration, with an emphasis on regional economic integration in the Americas. | | | | | | | | 1 | | | | | | | | 1 | |
| LAW | 7475 | Law | COASTAL & OCEAN LAW | This course is an advanced study of property law, water and natural resources law, and constitutional law from the perspective of the special needs of the coasts and oceans. | | | | | | 1 | | | | | 1 | | | 1 | | 1 | |
| LAW | 7481 | Law | ENERGY LAW & POLICY | This course is an advanced study of current energy law and policy, including the extraction, conversion, and distribution of energy resources. | | | | | | | 1 | | | | | | | | | 1 | |
| LDR | 2162 | Educational Leadership and Policy Studies | LEADERSHIP IN GROUPS AND COMMUNITIES | This course is designed to inspire, teach, and engage students in the process of learning leadership within the context of working with groups and communities. This course helps students develop the skills necessary in order to be effective in the leadership process and to practice these skills within their community. The course is highly interactive, with student participation and outside class involvement as critical components to the learning process. | | | | 1 | | | | | | | | | | | | | |
| LDR | 2213 | Educational Leadership and Policy Studies | LDR FOR SOCIAL JUSTI | This course introduces students to theoretical frameworks in the field of social justice. Through these theories, the notions of privilege, oppression, power and difference are explored. Attention is given to specific social justice issues related to gender, sexual orientation, race, religion, ability, age, and class. Students examine social justice in the context of leadership and come to understand their unique role in creating social change on campus, in their academic discipline, and within our larger society. | 1 | 1 | 1 | | 1 | | | 1 | 1 | | | 1 | 1 | | | 1 | 1 |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|--|--|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| LDR | 2231 | Educational Leadership and Policy Studies | GLOBAL LEADERSHIP | This course helps students develop the skills necessary to interact globally whether at home or abroad. It leads students to develop a sense of curiosity for diverse cultures and understanding the various behaviors, attitudes, and emotions which are found globally and impact our daily lives. The knowledge gained about global leadership allows students to recognize and respect cultural differences and be able to maneuver situations more accurately as well as gain insight and understanding of recent world leaders. | | | | | | | | | | | | | | | 1 | 1 |
| LDR | 2242 | Educational Leadership and Policy Studies | GENDER & LEADERSHIP | This course is an exploration of the intersections of the complex social construct of gender and the intricacies of enacting leadership. This course considers the experiences of women, trans*, genderqueer, and men leaders as well as concepts of gender expression and the intersectionality of identities as influencers on leadership access and practice. | | | | | 1 | | | | 1 | 1 | | | | | | |
| LDR | 2290 | Educational Leadership and Policy Studies | LDR & SUST IN ACTION | This course is designed to introduce students to the concept of leadership and action related to sustainability. It looks at the interconnectedness and complexity of the three pillars of sustainability (environment, economic, and social) as well as discusses the development of the leadership skills needed to create social change. In conjunction with class discussions and readings, students develop a personal sustainability plan to help align passion and values into active practice. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| LEI | 1181 | Recreation, Tourism and Events | LEI&REC FOR ALL AGES/ABILITIES | This course introduces students to the concepts of leisure and recreation for people of varying abilities. Students review best practices for inclusion in facilities and programs. This course is interactive, with student participation through simulations, group discussions, presentations, and opportunities for personal reflection. | | | | | | | | | | | | | | | 1 | |
| LEI | 2318 | Recreation, Tourism and Events | EVENTS ETHICS & SUSTAINABILIT Y | This course provides an overview of ethics and corporate social responsibility in the meetings, conventions, and events industry. Students evaluate the application of ethical practices in the meeting and events industry. The correlation between ethical behavior and corporate social responsibility is also analyzed. Students learn to identify and determine when sustainability related practices are applied to meetings, conventions, and events. | 1 | 1 | 1 | | 1 | | | 1 1 | | | 1 | 1 | | | 1 | 1 |
| LEI | 3266 | Recreation, Tourism and Events | OUTDOOR ADVENTURE ED | This course provides education in teaching leadership and programming skills for outdoor adventures through observation, direct participation and skills demonstration. | | | | 1 | | | | | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| LIS | 5241 | Information | INTL & COMP INFO | This course examines the important role information plays in the lives of individuals around the world. The course focuses on analysis of information management and access at the national or country level in the context of international globalization. Students develop the knowledge, skills and abilities needed to analyze and compare the social, cultural, economic and political factors that affect access to information and information service provisions. | | | | | | | | | | | | | | | | |
| LIT | 3622 | English | ECO- LITERATURE AND ECOCRITICISM | This course considers what literature and literary criticism respond to ecological and climatological change, its history, and politics. | | | | | | | | | | | | 1 | | | | |
| MAN | 4701 | Managemen t | BUSINESS & SOCIETY | This course is an examination of current and future issues in business and society with emphasis on the social responsibility of business and future challenges for business in a pluralistic society. | | | | 1 | 1 | | 1 | | 1 | | | | | | 1 | |
| МСВ | 4403 | Biological Science | PROKARYOTIC BIOLOGY | This course covers structural and functional characteristics of microorganisms, with emphasis on prokaryotes (bacteria and archaea) and viruses. Topics include: prokaryotic cell structure and function, physiology and genetics of prokaryotes and viruses, physiological and molecular aspects of microorganisms and human disease, and biotechnological applications of microbial physiology (environmental, food, and industrial microbiology). | | 1 | 1 | | | | | | | | | 1 | | | | |
| MDE | 7106 | Medicine | HEALTH EQUITY ELECTIVE | This course takes a broad approach to share concepts, current issues, and applications in this field embedded in a life course, person and population-centered perspective. Students will share and grow from each other's diverse backgrounds and learning skills in an effort to critically appraise literature focused on identifying and addressing health disparities and tangible measures to achieve health equity. | | | 1 | | | | | | 1 | | | | | | | |
| MET | 1010 | Earth, Ocean, and Atmospheric Science | INTRO TO ATMOSPHERE | This course covers the structure of the atmosphere; weather processes and weather systems, including climatic processes. Credit may not be received in this course if a student has already received credit in 2000-level or higher MET courses. | | | | | | | | | | | | 1 | | | | |
| MET | 1050 | Earth, Ocean, and Atmospheric Science | NATURAL HAZARDS AND DISASTERS | This course provides a survey of earth, ocean, and atmospheric sciences through an examination of natural hazards and disasters. The course examines the nature and physical processes that drive the hazards, the dangers associated with it, the scientific methods of forecasting such events, and approaches to their mitigation. | | | 1 | | | | | | | | | 1 | 1 | 1 | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| MET | 2101 | Earth, Ocean, and Atmospheric Science | PHYSICAL CLIMATOLOGY | This course covers global distribution of principal climatic elements with emphasis on physical causes. Statistical analysis of distributions of climatological variables. | | | | | | | | | | | | 1 | | | | |
| MET | 2700 | Earth, Ocean, and Atmospheric Science | GENERAL METEOROLOG Y | This course covers atmospheric structure and composition; weather and circulation systems; physics of atmospheric processes, including thermodynamics of dry and moist air. | | | | | | | | | | | | 1 | | | | |
| MET | 3300 | Earth, Ocean, and Atmospheric Science | INTRO ATMSPH DYNAMIC | This course will examine a variety of topics, including equations of motion, mass conservation, thermodynamics, vorticity, and geostrophic, gradient and thermal winds. | | | | | | | | | | | | 1 | | | | |
| MET | 5117 | Earth, Ocean, and Atmospheric Science | REGIONAL HYDROCLIMAT OLOGY | This course dwells on the physical and dynamical basis for the maintenance and variations of regional hydroclimate in the current and a changing future climate. | | | | | | | | | | | | 1 | 1 | | | |
| MET | 5471 | Earth, Ocean, and Atmospheric Science | SAT RMOTE SENSNG PLANET ATMOSP | This course covers composition, extent, properties, cloud forms, general circulation; geophysics of the planets; theoretical deductions; implications for general circulation on Earth. | | | | | | | | | | | | 1 | | 1 | | |
| MET | 5533 | Earth, Ocean, and Atmospheric Science | TROPCL METEOROLOG Y I | This course is a lecture-laboratory on planetary and synoptic-scale systems of the tropics including hurricanes. | | | | | | | | | | | | 1 | | | | |
| MET | 5534 | Earth, Ocean, and Atmospheric Science | TROPICAL METERLGY II | This course covers convection, boundary layer processes, local weather phenomena, mesoscale tropical systems, hurricane structure. | | | | | | | | | | | | 1 | | | | |
| МЕТ | 5607 | Earth, Ocean, and Atmospheric Science | ATMOSPHERIC CHEMISTRY | This course examines the role of atmospheric chemistry in air pollution, climate change, and environmental health. Students examine the physical and chemical processes that control the composition of the atmosphere and the global cycles of airborne pollutants and nutrients. The course is organized around marquee environmental issues: surface and stratospheric ozone, acid rain, aerosols, greenhouse gas budgets, and toxic metals. | | | 1 | | | | | | | | | 1 | 1 | 1 | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|-----------------------------------|--|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| MET | 6147 | Earth, Ocean, and Atmospheric Science | LINKING WEATHER AND CLIMATE | This course shows how weather and climate are intricately linked, and how to analyze and model this two-way interaction using advanced dynamics and statistics. | | | | | | | | | | | | 1 | | | | |
| MET | 6155 | Earth, Ocean, and Atmospheric Science | ADV TOPICS CLIMATE | This course covers advanced topics and recent advances in climatology. Content varies covering such areas as climate modeling, physical climatology, dynamic climatology, climate change, and climate and the oceans. May be repeated up to six times to a maximum of eighteen semester hours. | | | | | | | | | | | | 1 | 1 | | | |
| МЕТ | 3103C | Earth, Ocean, and Atmospheric Science | CLIMATE CHANGE SCI | This course enables students to explore the science behind our understanding of climate change. The course provides an in-depth exploration of the use of proxi, in situ, remote-sensing data, climate models, and their public policy implications. Students gain experience in evaluating internal and external forcings on the climate system and make quantitative assessments of change. The course also gives students an understanding of energy transfer methods between the atmosphere, cryosphere, oceans, and fresh water systems. | | | | | | | | | | | | 1 | 1 | | | |
| NUR | 3177 | Nursing | HOLISTIC APPRCH HLTH | This course is designed to explore knowledge of practices that promote health and well-being. Emphasis is on stress management and body-mind-spirit communication. A variety of holistic and complementary approaches to health and healing are explored. | | | 1 | | | | | | | | | | | | | |
| NUR | 3678 | Nursing | NSG CARE VULNER POPU | This course examines the application of nursing and related theories to the care of vulnerable populations throughout the life cycle. Emphasis is placed on nursing care of the elderly, clients with psychosocial disorders, and at-risk culturally diverse populations in the community. The impact of poverty, environment, support networks, health policy, and community resources on vulnerable populations and health outcomes is explored. The focus is on promoting client independence and maximizing quality of life of vulnerable individuals, families and communities. | 1 | | 1 | | | | | | 1 | | | 1 | | | 1 | |
| NUR | 4667 | Nursing | POPULATION HLTH IN NSG | This course introduces students to global health, the U.S. healthcare system, the social determinants of health, environmental health, emerging infectious disease, disaster planning and population support during disasters, and other mass casualty situations. In addition, using Healthy People/WHO indicators in evidence based decision making and utilizing the process of community assessment including the tools of epidemiology and biostatistics are reinforced. | | | 1 | | | | | | | 1 | | 1 | | | | 1 |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|----------------------------|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| ОСВ | 4631 | Earth, Ocean, and Atmospheric Science | COASTAL ECOLOGY | This interdisciplinary course addresses the ecology of estuaries and the part of the inshore waters with which estuaries interact directly. The lectures address the general ecological principles that govern the productivity and diversity of estuaries, including their hydrodynamics, sedimentology, chemistry, as well as plant and animal community structure. Key species of estuarine systems are introduced and cycles of carbon and nutrients are explained. | | | | | | | | | | | | | 1 | | | |
| ОСВ | 4637 | Earth, Ocean, and Atmospheric Science | MARINE BENTHIC ECOLO | This course studies the physical setting and ecological organization of the communities found in the rocky intertidal, in the fouling habitat, on sandy beaches, in subtidal soft bottoms, and in the deep sea. This is presented through lectures, substantial reading, and class discussions. | | | | | | | | | | | | | 1 | 1 | | |
| ОСВ | 5565 | Earth, Ocean, and Atmospheric Science | MARINE PRIM PRODUCTI | This course studies the factors that affect the biomass production and spatial distribution of phytoplankton, seagrasses, and macroalgae in the ocean. It also explains the key role of marine primary production in the global carbon cycle. | | | | | | | | | | | | 1 | 1 | | | |
| ОСВ | 5635 | Earth, Ocean, and Atmospheric Science | COASTAL PROCESSES | This course addresses selected topics in coastal ocean ecology with emphasis on changes caused by anthropogenic activities. The lectures address key physical, chemical and biological processes, including coastal upwelling, cycling of matter, hypoxia, and biological diversity changes. The course format includes student presentation, readings, and class discussions. | | | | | | | | | | | | 1 | 1 | 1 | | |
| ОСВ | 5639 | Earth, Ocean, and Atmospheric Science | MARINE BENTHIC ECOLG | This course is open to advanced undergraduates with instructor permission. The physical setting and community organization of these habitats are presented through lectures and substantial readings: rocky intertidal, sand beach, subtidal soft bottom, coral reef, deep-sea habitats. | | | | | | | | | | | | | 1 | | | |
| осс | 4002 | Earth, Ocean, and Atmospheric Science | BASIC CHEM OCEANOG | This course focuses on the chemical composition of seawater, carbon dioxide system, nutrients, trace elements, and biogeochemistry. | | | | | | | | | | | | | 1 | | | |
| осс | 4060 | Earth, Ocean, and Atmospheric Science | ENV SCI MODELING | This course gives students an understanding of explanatory and predictive models of the earth's systems and environmental processes therein. Analytical and numerical methods for solving equations are examined and applied. Discussions cover relevant scientific issues, mathematical and computational procedures, visualization techniques, as well as the use of models in research and decision making. | | | | | | | | | | | | | 1 | 1 | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|------------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| осс | 5050 | Earth, Ocean, and Atmospheric Science | BASC CHEMCL OCEANOGR | This course introduces students to the chemical composition of seawater, carbon dioxide systems, nutrients, trace elements, and biogeochemistry. | | | | | | | | | | | | | 1 | | | |
| осс | 5052 | Earth, Ocean, and Atmospheric Science | AQUATIC CHEMISTRY | This course focuses on thermodynamics, acid-base and redox reactions in natural waters, solution-precipitation reactions, complex formation, case studies of composition of seawater, and controlling processes. | | | | | | | | | | | | | 1 | | | |
| осс | 5417 | Earth, Ocean, and Atmospheric Science | GEOCHEM OCEAN TRACRS | This course focuses on mixing models and processes affecting dissolved concentrations and distributions of chemicals and radiotracers in the world's oceans. | | | | | | | | | | | | | 1 | | | |
| OCE | 1001 | Earth, Ocean, and Atmospheric Science | ELEMENTRY OCEANGRPHY | This course studies the structure and motion of the ocean and its environs, properties, populations, and energy budget. Not intended for upper-division science or mathematics majors. Upper-division science or mathematics majors are encouraged instead to take OCE 4008. | | | | | | | 1 | | | | | | 1 | | | |
| OCE | 4008 | Earth, Ocean, and Atmospheric Science | PRINCPL OCEANOGRAP HY | This course focuses on dynamic motions and life processes in the marine environment. Long-term geologic history of the oceans and recent changes caused by man. An overview of oceanography for upper-division students majoring in science, mathematics, or science teaching. | | | | | | | | | | | | 1 | 1 | | | |
| OCE | 4017 | Earth, Ocean, and Atmospheric Science | ISSUES ENVIRO SCIENC | This course is taught at an introductory level and includes discussions of current ground-breaking research, environmental problems, and approaches to solving them. It consists of presentations by experts on their current research topics or on environmental issues. | | | | | | | | | | | | 1 | | | | |
| OCE | 4064 | Earth, Ocean, and Atmospheric Science | MARINE CONSERVATIO N BIOLOGY | This course discusses anthropogenic impacts on the world's marine biological resources and ways to mitigate those impacts. The course begins with a brief overview of some relevant key concepts in marine biology and ecology. | | | | | | | | | | | | 1 | 1 | | | |
| OCE | 4265 | Earth, Ocean, and Atmospheric Science | CORAL REEF ECOLOGY | In this course students learn the components of warm water coral reef ecosystems, their functions and interactions, and their response to environmental change. The course addresses biological, chemical and physical processes that govern the ecology of warm water coral reef ecosystems, as well as the anthropogenic impact on reef ecosystems and the management of coral ecosystems. | | | | | | | | | | | | 1 | 1 | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 39 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|------------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| OCE | 5009 | Earth, Ocean, and Atmospheric Science | ADV GEN OCEANOGRAP HY | This course is an overview of geological, physical, chemical, and biological oceanography. The major hypothesis in each subdiscipline is described. Cross-linkages between subdisciplines are used to show the interdisciplinary nature of modern oceanography. | | | | | | | | | | | | 1 | | | | |
| OCE | 5018 | Earth, Ocean, and Atmospheric Science | ISSUES ENVIRO SCIENC | This course is taught at an introductory level and includes discussions of current ground-breaking research, environmental problems and approaches to solving them. This course consists of presentations by experts on their current research topics or on environmental issues. | | | | | | | | | | | | 1 | | | | |
| OCE | 5065 | Earth, Ocean, and Atmospheric Science | MARINE CONSERVATIO N BIOLOGY | This course helps students understand anthropogenic impacts on the world's marine biological resources and ways to mitigate those impacts. | | | | | | | | | | | | 1 | 1 | | | |
| OCE | 5077 | Earth, Ocean, and Atmospheric Science | MARINE ENVIRONMENT POLLUTION | This course explains sources of marine pollutants, their effects on organisms, and ensuing consequences for marine ecosystems. Focal points are persistent anthropogenic pollutants that accumulate in the estuarine and marine environment. Pollutant amplification in the food web, physiological responses and degradation pathways are discussed. | | | | | | | | | | | | 1 | 1 | | | |
| OCE | 5009L | Earth, Ocean, and Atmospheric Science | MARINE FIELD METHODS | This course provides a multi-disciplinary, hands-on experience of the field methods most commonly used in oceanography. It gives graduate students the opportunity to gain a greater appreciation of the complexity of marine-ecosystem dynamics through active participation in ocean-science field research. | | | | | | | | | | | | | 1 | | | |
| OCP | 4005 | Earth, Ocean, and Atmospheric Science | INTR PHYS OCEANGRPHY | This course examines waves, currents, tides, El Nino, and climate change prediction. | | | | | | | | | | | | 1 | 1 | | | |
| OCP | 5050 | Earth, Ocean, and Atmospheric Science | BASC PHYSL OCEANGPHY | This course studies seawater properties, currents, waves, tides, and acoustics. Not open to students in physical oceanography option. | | | | | | | | | | | | | 1 | | | |
| OCP | 5056 | Earth, Ocean, and Atmospheric Science | INTRO PHYSCL OCEANOG | This course studies the properties of seawater, equations of motion and continuity of volume, geostrophic motion, stability and double diffusion, ocean currents. | | | | | | | | | | | | | 1 | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|--|------------------------------------|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| OCP | 5551 | Earth, Ocean, and Atmospheric Science | PHY AIR SEA BNDY LAY | This course focuses on topics such as: flux of momentum, heat, and water; study of air sea interaction mechanism of exchange and budgets. Also offered by the Department of Oceanography. | | | | | | | | | | | | | 1 | | | |
| PAD | 3013 | Public Administratio n and Policy | FUTURES STUDIES | This course applies futures studies perspectives and methods to the study of societal trends and conditions. Emphasis is on the development of anticipatory public policy. | | | | | | | | | | | | | | | 1 | |
| PAD | 3223 | Public Administratio n and Policy | SOCIAL ENTREPRENEU RSHIP | This course facilitates socially significant innovation through the development of tools, skills, and knowledge. Students examine social entrepreneurship through nonprofit (and public) organizational examples and interactions with social entrepreneurs within their own community. | | | 1 | | | | | 1 | | | | | | | | |
| PAD | 4170 | Public Administratio n and Policy | NONGOVT ORGS IN DEVELOP | This survey course is about international development NGOs. The course presents contemporary perspectives about NGOs, describes how NGOs operate, and introduces the challenges that their managers face and potential solutions for them. | | | | | | | | | | | | | | | | 1 |
| PAD | 4301 | Public Administratio n and Policy | DISASTER MGT PLAN URBAN POOR | This course discusses the elements that intensify risk where informal and non-permanent settlement housing is prevalent. Government interventions, especially those involving urban planning and policy are studied and their repercussions to the social, economic and cultural networks of these communities analyzed. | 1 | | | | | | | | | 1 | | | | | 1 | |
| PAD | 4380 | Public Administratio n and Policy | DISASTERS: SHOCK TO RECOVERY | This course utilizes multiple case studies to examine the complexity of disaster situations in the United States and internationally. The course covers a different disaster case study every week, focusing on event-specific conditions that created/contributed to the disaster, local preparedness, response and recovery in the aftermath of the event. | | | | | | | | | | 1 | | | | | | |
| PAD | 4382 | Public Administratio n and Policy | DISASTER RECOVERY | This course is designed to provide an overview of recovery and mitigation activities in the post-disaster environment. Focusing on the "Recovery Phase" initially, course materials examine the policy and planning mechanisms involved in short and long term rehabilitation of distressed communities. A similar examination from the "Mitigation Phase" is also made. | | | | | | | | | | 1 | | | | | | |
| PAD | 4395 | Public Administratio n and Policy | DISASTER SYSTEMS | This course introduces students to the fundamental concepts, theories, principles, and practices of the role of Incident Command (ICS) as an organizational structure, Emergency Operations Centers (EOC) in coordinating response and recovery to crises, and information and knowledge management systems that support disaster management. | | | | | | | | | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|--------------------------------------|---|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| PAD | 4433 | Public Administratio n and Policy | WOMEN, DISASTERS, AND CONFLICT | This course examines the role of women in disasters. The course also evaluates the role that women play in conflict and peace building. The course covers topics to include gender mainstreaming, LGBTQ issues, UNSCR 1325, gender based violence, and human trafficking. | | | | | 1 | | | | | 1 | | | | | | |
| PAD | 4831 | Public Administratio n and Policy | INTERN. CONFLICT AND TERRORISM | This course introduces students to historical and ongoing conflicts around the world. Students understand how these conflicts have created terrorism and various tools to end both the conflict and the resulting terrorism. Students examine the drivers of conflict such as relative deprivation, dehumanization, and various politics. Students also understand how conflict resolution tools such as Peacekeepers, political revolution/evolution, autonomy/sovereignty, and violence can bring peace and end terrorism. | | | | | | | | | | | | | | | 1 | 1 |
| PAD | 4833 | Public Administratio n and Policy | INTL COMP DIS MANG | This course discusses practical and theoretical issues associated with international disaster management. Risk, hazards, and disasters are addressed from a global perspective with particular emphasis placed on the differences in key issues between developing and developed countries. | | | | | | | | | 1 | 1 | | | | | | |
| PAD | 4844 | Public Administratio n and Policy | PUBLIC HEALTH AND EM | This course examines global disasters and cascading public health consequences. The course also explores domestic and international disaster health policies, response and recovery practices. | | | 1 | | | | | | | 1 | | | | | | |
| PAD | 4891 | Public Administratio n and Policy | NGO'S AND DISASTERS | This course is designed to introduce students to the fundamental concepts, theories, principles, and practices in emergency management relationships with NGOs and non-profit organizations. | | | | | | | | | | 1 | | | | | | 1 |
| PAD | 5173 | Public Administratio n and Policy | NONGOVT ORGS | This course covers nongovernmental organizing in international and transnational contexts, explores the dynamics in which NGOs are embedded, examines their historical trends, and illuminates the challenges and opportunities that NGOs face. | | | | | | | | | | | | | | | | 1 |
| PAD | 5310 | Public Administratio n and Policy | DISASTER MGT PLAN URBAN POOR | This course discusses the elements that intensify risk where informal and non-permanent settlement housing is prevalent. The course studies government interventions, especially those involving urban planning and policy, and analyzes their repercussions to the social, economic and cultural networks of these communities. | 1 | | | | | | | | | | | | | | 1 | |
| PAD | 5378 | Public Administratio n and Policy | DISASTER SYSTEMS | This course helps students not only recognize the underlying concepts, principles, and theories inherent in modern disaster response operations, but also comprehend the intricate interdependencies of these systems. Of equal importance is the impact information technology has upon these systems. | | | | | | | | | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|--------------------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| PAD | 5388 | Public Administratio n and Policy | DISASTER RECOVERY | This course is designed to provide an overview of recovery and mitigation activities in the post-disaster environment. Focusing on the "Recovery Phase" initially, course materials examine the policy and planning mechanisms involved in short and long term rehabilitation of distressed communities. A similar examination from the "Mitigation Phase" is also made. | | | | | | | | | | 1 | | | | | | |
| PAD | 5389 | Public Administratio n and Policy | DISASTERS: SHOCK TO RECOVERY | This course utilizes multiple case studies to examine the complexity of disaster situations in the United States and internationally. The course covers a different disaster case study every week, focusing on event-specific conditions that created/contributed to the disaster, local preparedness, response and recovery in the aftermath of the event. | | | | | | | | | | 1 | | | | | | |
| PAD | 5475 | Public Administratio n and Policy | WOMEN, DISASTERS, AND CONFLICT | This course examines the role of women in disasters. The course also evaluates the role that women play in conflict and peace building. The course covers topics including gender mainstreaming, LGBTQ issues, UNSCR 1325, gender based violence, and human trafficking. | | | | | 1 | | | | | 1 | | | | | 1 | |
| PAD | 5828 | Public Administratio n and Policy | NGOS AND DISASTER | This course is designed to introduce students to the fundamental concepts, theories, principles and practices in emergency management relationships with NGOs and non-profit organizations. | | | | | | | | | | 1 | | | | | | 1 |
| PAD | 5835 | Public Administratio n and Policy | INTL COMP DIS MANG | This course discusses practical and theoretical issues associated with international disaster management. Risk, hazards, and disasters are addressed from a global perspective with particular emphasis placed on the differences in key issues between developing and developed countries. | | | | | | | | | 1 | 1 | | | | | | |
| PAD | 5836 | Public Administratio n and Policy | INTL AND COMPAR ADMIN | This course deals with activities of public administration and governance in international contexts. The course updates comparative administration's history and explores international institutions in the face of globalization. | | | | | | | | | | | | | | | | 1 |
| PAD | 5839 | Public Administratio n and Policy | INTERN CONFLICT AND TERRORISM | This course introduces students to historical and ongoing conflicts around the world. Students explore how these conflicts have created terrorism and various tools to end both the conflict and the resulting terrorism. Students learn the drivers of conflict such as relative deprivation, dehumanization, and various -politics. Students also analyze how conflict resolution tools such as Peacekeepers, political revolution/evolution, autonomy/sovereignty, and violence can bring peace and end terrorism. | | | | | | | | | | | | | | | 1 | |
| PAD | 5845 | Public Administratio n and Policy | PUBLIC HEALTH AND EM | This course examines global disasters and cascading public health consequences. The course also explores domestic and international disaster health policies, response, and recovery practices. | | | 1 | | | | | | | 1 | | | | | | 1 |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|--|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| PAD | 5935 | Public Administratio n and Policy | SEMINAR IN PUBLIC ADMINISTRATI ON: SELECTED TOPICS (SOCIAL EQUITY) | This course acquaints students with special topics in the field of Public Administration, the processes and platforms for information/data gathering and analysis and how it is used by policy/decision-makers. Throughout the course students are given opportunities to gather, analyze and report their findings to case-studies and then compare their conclusions to real-world outcomes. May be repeated to a maximum of twenty-one (21) credit hours; repeatable within the same term. | | | | | | | | | 1 | 1 | | | | | | 1 |
| PAD | 5935 | Public Administratio n and Policy | SEMINAR IN PUBLIC ADMINISTRATI ON: SELECTED TOPICS (SUSTAINABILIT Y) | This course acquaints students with special topics in the field of Public Administration, the processes and platforms for information/data gathering and analysis and how it is used by policy/decision-makers. Throughout the course students are given opportunities to gather, analyze and report their findings to case-studies and then compare their conclusions to real-world outcomes. May be repeated to a maximum of twenty-one (21) credit hours; repeatable within the same term. | | | | | | | | | | | | | | | | 1 |
| PAS | 5056 | Medicine | US HEALTHCARE SYST. AND POLICY | This course examines the U.S. healthcare system, regulations, and policies that affect the delivery of healthcare in the United States. | | | 1 | | | | | | | | | | | | 1 | |
| РСВ | 3043 | Biological Science | GENERAL ECOLOGY | This course focuses on topics such as population biology; population growth; community processes, succession, nutrient cycling, and energy flow; species interactions; ecological efficiency; and biogeographical ecology. | | 1 | | | | | | | | | | | | 1 | | |
| РСВ | 4402 | Biological Science | ECOLOGY OF INFECTIOUS DISEASE | This course explores how concepts and tools of basic ecology can and have been used to understand the dynamics of infectious disease, and contribute to our ability to predict, prevent, and control disease outbreaks. Students consider diseases of humans and their domesticated plants and animals, as well as the role of disease in natural systems. Students are also expected to read extensively in the primary literature, and to contribute to regular class activities and discussions as well as research and present information on specialized topics such as the role of conservation corridors in the spread of disease, possible responses to pandemics and bioterrorism, and identification of sources of emerging diseases. | | | 1 | | | | | | | | | | | | | |
| PCB | 5425 | Biological Science | POPULATION ECOLOGY | This course studies the theory of population growth and regulation, demographic theory and analytical methods, life history variation and evolution. | | | | | | | | | | 1 | 1 | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-----------------------|-------------------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| РСВ | 5447 | Biological Science | COMMUNITY ECOLOGY | This course introduces students to community concepts; species richness models; matrices and communities; competition and species packing; predation and dominance. | | | | | | | | | | | | | | 1 | | |
| РСВ | 5615 | Biological Science | ECOLOGICAL GENETICS | This course covers the fundamentals of modern ecological genetics. The course begins with an overview of genetic variation, its measurement, and the forces responsible for the origin and maintenance of variation within and among populations. The remainder of the course describes the ecological context of evolution, and the ecological and evolutionary forces that shape variation within and between populations. Emphasis is placed on experimental studies of natural populations, and the relationship between theory and experiments. Several advanced topics are covered in the second part of the course: life-history evolution, sexual selection, applied ecological genetics, and molecular evolution. | | | | | | | | | | | | | | 1 | | |
| РСВ | 6938 | Biological Science | SEM:ECOL&EVL TNRY BIO | May be repeated to a maximum of eight semester hours within the same term. | | | | | | | | | | | | | | 1 | | |
| РСВ | 3043L | Biological Science | LAB FOR ECOLOGY | Pre- or corequisite: PCB 3043. In this course, topics covered include quantifying populations and population growth; species interactions such as competition, predation, and mutualisms; documenting community patterns against gradients; adaptation and traits of species; habitat use, movement and species ranges; natural history of local habitats. | | | | | | | | | | | | | | 1 | | |
| РНС | 4101 | Public Health | INTRODUCTION TO PUBLIC HEALTH | This course introduces students to key public health concepts, the history of public health, and how the core areas of public health can be integrated to promote health at a population level. The course covers principal areas of public health, including analytic methods, epidemiology, social and behavioral factors, environmental issues, and medical care. | | | 1 | | | | | | | | | | | | | |
| РНС | 4157 | Public Health | HEALTH POLICY AND SOCIETY | This course introduces students to the major public health concerns currently facing the U.S. population and a variety of policies intended to address them. The course begins with an overview of how the American healthcare system works and how it compares to other health care systems across the world. Students also examine how issues of race, class, gender, sexuality, and age influence the availability, cost and quality of the health care individuals receive. | | | 1 | | | | | | 1 | | | | | | | |
| РНС | 4320 | Public Health | ENVIRONMENT AL HEALTH | This course introduces students to environmental health issues, scientific understanding of causes, and possible future approaches to address major environmental health problems. This course covers key areas of environmental health, including environmental epidemiology, risk assessment, pollution, and education. | | | 1 | | | | | | | | 1 | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 9 10 |) 1 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|----------------------|--------------------------|--|---|---|---|---|---|---|---|-----|------|-----|----|----|----|----|----|----|----|
| PHC | 5300 | Public Health | ENVIRONMENT AL HEALTH | This course covers the science behind the basic elements of environmental health and its centrality to human health. It includes the basics of providing a pure water supply, sanitation of waste matters, and common field procedures needed for environmental surveillance. | | | 1 | | | 1 | | | | | | 1 | | | | | |
| PHI | 2620 | Philosophy | ENVIRONMENT AL ETHICS | This course focuses on philosophical issues raised by environmental problems and the sciences designed to resolve them. The course also analyzes the historical development of environmental perspectives and the ethical theories that have been generated by these approaches. | | | | | | | | | | | | | 1 | 1 | 1 | | |
| POS | 3122 | Political Science | STATE POLITICS | This course focuses on government and politics in the American states. It looks at the governor, the legislature, and the courts; the history of federalism; and policies, practices, and social institutions that affect state government. Includes a study of state policies in such areas as welfare, education, crime, and the environment. | 1 | | 1 | | | | | | | | | | | | | 1 | |
| POS | 5127 | Political Science | STATE GOVT & POLITCS | This course is a comparative analysis of the organization and behavior of major political factors, institutions, and policies in the 50 states. Topics include state constitutions, federalism, political participation, political parties, interest groups, legislatures, courts, governors and administration, and analysis of various policies such as education, welfare, transportation, environmental protection, and civil rights. | 1 | | | | | | | | | | 1 | | 1 | | | 1 | |
| PUP | 4203 | Social Science | ENVIR POLIT & POLICY | This course focuses on the actions taken by government to protect and improve environmental quality in the United States. It includes such topics as the underlying scientific principles, the major actors in policy making, existing legislation, and future challenges. Background in science is not necessary. | | | | | | | | | | | | | 1 | 1 | 1 | | 1 |
| SOW | 4232 | Social Work | SOC WELF POLICY PROG | This course provides a beginning understanding of the relationship between social welfare and social policy from a social work perspective. Students engage in policy practice to address social and economic well-being and to deliver effective social work services across diverse populations. Attention is given to critical analysis of the role that social work and social welfare policies and programs play in advancing human rights and social and economic justice. | 1 | | | | | | | | 1 | | | | | | | 1 | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-------------|------------------------------------|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| SOW | 4620 | Social Work | DIVERSITY AND SOCIAL JUSTICE | This course enhances student understanding of human diversity and prepares students to engage in a lifetime pursuit of cultural competence. Students are encouraged to reflect upon and discuss the intricacies of their own particular dominant and/or minority social statuses and their relations to other individuals and communities. The course is designed to train students to apply theoretical frameworks to the forms and mechanisms associated with diversity, differences, and oppression. Emphasis is placed on enhancing respectful and empathic communication, and on the advancement of social and economic justice and human rights in national and global contexts. | 1 | | | | | | | | 1 | 1 | | | | | 1 | |
| sow | 4784 | Social Work | INTL SW & SOCIAL WEL | This course prepares students for international social-work practice and for transitional work with immigrants, refugees, international migrants, etc. The course also introduces international perspectives in the social-work field and offers varied examples of social-work practice in the U.S., and Western, Central European, and Caribbean nations and examines the impact of the global interdependence on social-work practice and policy and helps students learn to critically analyze varied practice approaches utilized in dealing with international welfare issues. | 1 | | | | | | | | 1 | | | | | | 1 | 1 |
| SOW | 4940 | Social Work | INTNTL COMMUNITY ENGAGEMENT | This course utilizes a service learning experience in an international social services organization to introduce students to international social work practice and a range of global social issues that shape human welfare and social development. | 1 | | | | | | | | 1 | | | | | | 1 | 1 |
| SOW | 5235 | Social Work | SW POLICY AND SERVICES | This course provides a beginning understanding of the relationship between social welfare and social policy from a social work perspective. Students engage in policy practice to address social and economic well-being and to deliver effective social work services across diverse populations. Attention is given to critical analysis of the role that social work and social welfare policies and programs play in advancing human rights and social and economic justice. Emphasis is placed on the advancement of social and economic justice and human rights in a global context. | 1 | | | | | | | | 1 | | | | | | 1 | 1 |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-------------------------|-----------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| sow | 5282 | Social Work | LEGISLATIVE ADVOCACY | This course exposes graduate students to the skills necessary to become effective human service advocates dealing with unmet needs, resolving social problems, or working to ameliorate unjust or inequitable conditions in society. As more decisions about social welfare programs have shifted from the federal to the state and local community levels, it is increasingly important for social workers to develop lobbying and advocacy skills to ensure social and economic justice. Such skills can help bring about much-needed policy changes for clients, promote and protect social work ethics and values, and positively affect human service funding during the budget appropriation process. | 1 | | | | | | | | 1 | | | | | | 1 | 1 |
| sow | 5785 | Social Work | INTL SW & SOCIAL WEL | This course prepares students for international social-work practice and for transnational work with immigrants, refugees, international migrants, etc. It introduces international perspectives in the social work field and offers varied examples of social work practice in the U.S., Western and Central European, and Caribbean nations. The course also examines the impact of the global interdependence on social-work practice and policy and helps students learn to critically analyze varied practice approaches utilized in dealing with international welfare issues. | 1 | | | | | | | | 1 | | | | | | | |
| SOW | 5943 | Social Work | INTNTL COMMUNITY ENGAGEMENT | This course utilizes a service learning experience in an international social services organization to introduce students to international social work practice and a range of global social issues that shape human welfare and social development. | 1 | | | | | | | | 1 | | | | | | 1 | 1 |
| SPC | 5545 | Communicat ion | STUDIES IN PERSUASION | This course involves lectures, readings, and discussions of human behavior theories as applied to persuasive communication. The course uses environmental and sustainability-related case studies. | | | | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | |
| SPM | 4012 | Sport Managemen t | SPORT IN SOCIETY | This course covers the role of sports in the United States, focusing on sports as social and cultural phenomena. Focus is on the relationships between sports and social variables such as race and gender, social institutions such as education and family, as well as social issues such as drug use and violence. | | | | 1 | 1 | | | | 1 | 1 | | | | | 1 | |
| SPM | 4025 | Sport Managemen t | DIVERSITY IN SPORT | This course examines the role and impact that ethnicity, racism, gender, and other diversity topics have had on sport, while providing students with an opportunity to develop an understanding and appreciation for diversity in sport. | | | | | 1 | | | | 1 | 1 | | | | | 1 | |
| SPM | 4204 | Sport Managemen t | ETHICS IN SPORT | This course is designed to examine major moral/ethical issues within sport. Students are introduced to critical-thinking regarding ethical issues in sport and learn to use moral reasoning to make ethical decisions in sport. | | | | | 1 | | | | 1 | 1 | | | | | 1 | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 1 | 1 1 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-------------------------|------------------------------------|---|---|---|---|---|---|---|-----|-----|----|---|-----|----|----|----|----|----|----|
| SPM | 4604 | Sport Managemen t | SPORT GOVERNANCE | In this course, topics and issues discussed involve the organizational theory, behavior, and structure of various sport organizations. The evolution of power and political activity engulfing sport organizations is examined as well as concepts of leadership and management related to the sport industry. The course also includes an outside project enhancing the student's understanding of a selected sport organization and its event. | | | | | | | | | | | | | | | | 1 | |
| SPM | 4630 | Sport Managemen t | INTERNATIONA L SPORT VENUES | This course is a study of the design and management of international sport venues. Topics include design, marketing, facility image, media and public relations, among others. The course includes site visits and discussions of issues and challenges that venue managers face. | | | | | | | | | | | | | | | | | 1 |
| SYA | 3741 | Sociology | SOCIOLOGY OF DEATH AND DYING | This course explores the structure of human response to death, dying, and bereavement with a focus on sociocultural and interpersonal context. The course explores how cultural and medical factors shape experience of a "good death," grief over the life course, functions of funeral practices, and death-related ethical debates such as physician assisted suicide. | | | 1 | | | | | | | | | | | | | | |
| SYA | 4010 | Sociology | SOCIOLOGICAL THEORY | This course introduces the student to the kind of theory that has developed in the field of sociology since its foundation, moving through to the contemporary scene. Major theoretical fields, major theorists, and dominant theoretical issues that continue to be part of the sociological approach to explanation are covered. | | | 1 | | | | | | | 1 | | | | | | | |
| SYA | 4300 | Sociology | METHODS OF SOCIAL RESEARCH | This course is a broad coverage of research design, data collection, and data analysis. | | | | | | | | 1 | | 1 | | | | | | | |
| SYA | 4400 | Sociology | SOCIAL STATISTICS | This course involves the application of statistical techniques to sociological data as illustrated in the research and writing of social scientists. As a course for majors, it represents an important part of the student's methodological training with respect to the statistical analysis of data typically used by sociologists. The student is expected to carry out a number of exercises involving the statistical analysis of sociological data and to interpret the results. | | | | | | | | | | 1 | | | | | | | |
| SYA | 4936 | Sociology | SOCIOLOGY SKILLS SEMINAR | This seminar course helps students answer the question "What can I do with a degree in sociology?" Students learn to apply their sociological imagination and sociological perspective to help them determine what they want to do after graduation. | | | | | | | | | | 1 | | | | | | | |
| SYD | 3020 | Sociology | POPULATION & SOCIETY | This course examines the causes and consequences of population change in the United States and the world with an assessment of the impact of demographic change on various social institutions. | | | | | | | | | | 1 | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------|--|---|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| SYD | 3374 | Sociology | CULTURE AND SOCIETY | This course explores the meanings of culture in contemporary U.S. society, with a focus on cultural representation, cultural products, and cultural (re)production. Students are introduced to sociological, feminist, critical race, and queer theoretical perspectives on "taste" (also known as cultural capital), power, and cultural representation, emphasizing how culture shapes our experiences and understandings of socially constructed phenomena such as class, race, sexuality, and gender. | | | | | 1 | | | | 1 | 1 | | | | | | |
| SYD | 3600 | Sociology | CITIES IN SOCIETY | This course takes a global perspective on the transformation of prehistoric, non-urban groups to contemporary urban societies. Students obtain background knowledge about our "global village" and how we arrived in it, along with analytical skills that allow them to evaluate and address fundamentally new cultural, political, and economic challenges posed by our increasingly urbanized and interconnected world. | | | | | | | | | | 1 | | | | | | |
| SYD | 3800 | Sociology | SEX AND GENDER | This course examines how gender, as an identity, interaction, institution, and inequality, influences individuals' lives and organizes society. | | | | | 1 | | | 1 | | | | | | | | |
| SYD | 4510 | Sociology | ENVIRONMENT AL SOC | This course examines the larger social forces that shape our natural environment; the social foundations of environmental problems; and the social responses to environmental issues, conflicts, and movements. | | | | | | | | | | 1 | | 1 | 1 | 1 | | |
| SYD | 4700 | Sociology | RACE AND MINORITY GROUP RELATIONS | This course explores historical and contemporary race relations in the United States from a sociological perspective. Specifically, students study the underlying issues that characterize the relations between and among different ethnic and racial groups in the United States. | | | | | | | | | 1 | | | | | | | |
| SYD | 4730 | Sociology | AFRICAN AMERICANS IN MODERN SOCIETY | This course examines the African-American experience in the U.S. with the goal of understanding how historical conditions and events shaped current circumstances. Focus is on African-Americans as situated in all major institutions (economy, polity, family, education, religion, welfare, military, criminal justice) and the consequences of their placement. The course applies sociological theories of race/ethnicity to past and current developments. | 1 | | | 1 | | | | | 1 | | | | | | 1 | |
| SYG | 1000 | Sociology | INTRODUCTOR Y SOCIOLOGY | This course is an introduction to the fundamentals of sociology. In the course, emphasis is placed on exposure to the basic findings of empirical research studies in a wide range of areas traditionally examined by sociologists. | | | | | | | | | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------|--|--|---|---|---|---|---|---|---|-----|----|----|----|----|----|----|----|----|
| SYG | 2010 | Sociology | SOCIAL PROBLEMS | This course represents a study of various contemporary social problems in an urbanized society, which may include such topics as education, the family, politics, the economy, race relations, drug use and alcoholism, over-population, and other issues. | 1 | | 1 | 1 | | | | | 1 | 1 | | | | | | |
| SYG | 2430 | Sociology | SOCIOLOGY OF MARRIAGE AND THE FAMILY | This course focuses on marriage and family relationships over the life course. Topics covered include dating, love, sexuality, cohabitation, marriage, divorce, reconstituted families, parenting, and marital and family relationships in later life. The major course objective is to critically analyze some of our most private social relationships from a sociological perspective. | | | | | | | | | | 1 | | | | | | |
| SYO | 3100 | Sociology | FAMILIES AND SOCIAL CHANGE | This course is a basic sociological approach to conditions, issues, and problems of familial organization within the context of changing institutional structures of modern society. Attention is given to such questions as: How have spouse roles changed, and why? How do changes in the organization of work affect family experience? How are family and kinship patterns affected by an aging population? etc. | | | | | | | | | | 1 | | | | | 1 | |
| SYO | 3200 | Sociology | SOCIOLOGY OF RELIGION | This course focuses on the basic sociological perspective of the social organization and forms of religious life in modern society. In the course, religious groups are studied as organizations that contribute to social stability, social conflict, and social change. | | | | | | | | | | 1 | | | | | | |
| SYO | 3460 | Sociology | SOCIOLOGY OF MASS MEDIA | This course provides a sociological view of mass communications by critically examining the origin, history, and functions of the American mass media and its effect on social life. | | | | | | | | | | 1 | | | | | | |
| SYO | 3530 | Sociology | SOC CLASS & INEQUAL | This course explores the origins and organization of social movements, the dilemmas and challenges facing social movements, the relationship between social movements and political institutions, and the role of social movements in causing social change. | | | | | | | | | | | | | | | 1 | 1 |
| SYO | 4250 | Sociology | SOCIOLOGY OF EDUCATION | This course presents a sociological approach to the study of education as a social institution, its structure, functions, and role in contemporary life. | | | | 1 | | | | | | | | | | | | |
| SYO | 4300 | Sociology | SOCIOLOGY OF POLITICS | This course deals with American political institutions, political organizations, pressure groups, and the public's participation in political processes. Discussion focuses on current political issues from a sociological perspective. | | | | | | | | | | | | | | | | 1 |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|------------|---|--|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| SYO | 4374 | Sociology | GENDER, WORK, AND FAMILY | This course examines the forces that create, reproduce, and erode inequalities centering on gender, work, and family. The course requires a critical perspective analyzing the cultural and structural forces that generate and sustain the gender gap in the professional and domestic domains. | 1 | | | | 1 | | | | 1 | | | | | | | |
| SYO | 4402 | Sociology | MEDICAL SOCIOLOGY | This course explains why and how social structure influences the distribution of health and illness and illustrates how the medical care system is organized and responds. | | | 1 | | | | | | 1 | | | | | | | |
| SYO | 4461 | Sociology | NEW MEDIA AND SOCIAL CHANGE | This course surveys some of the research outlining the influence of mass media on individuals, institutions, and culture. The course pays attention to both "old" media (e.g., television and newspapers) and "new" media (e.g., websites, and social media) and broadly explores how technological changes affect social institutions and society. | | | | | | | | 1 | | | | | | | | |
| SYP | 3000 | Sociology | SOCIAL PSYCHOLOGY OF GROUPS | This course represents the study of social psychology from a sociological perspective. Specifically, it is an analysis of the influence of groups and the individual on each other, including the study of norms, group pressure, leadership, motivation, and social personality. | | | | | | | | | | 1 | | | | | | |
| SYP | 3350 | Sociology | COLLECTIVE ACTION AND SOCIAL MOVEMENTS | This course explores the origins and organization of social movements, the dilemmas and challenges facing social movements, the relationship between social movements and political institutions, and the role of social movements in causing social change. | | | | | | | | | | 1 | | | | | 1 | |
| SYP | 3450 | Sociology | SOCIOLOGY OF LAW | This course examines the interrelationship between the legal order and the social order. Limitations of civil and criminal law for conflict management and for implementation of social policy are considered. | | | | | | | | | | | | | | | 1 | |
| SYP | 3730 | Sociology | AGING AND THE LIFE COURSE | This course introduces students to aging from a variety of perspectives, integrating information from various social science disciplines. This course focuses on several important areas of theory and research, including the way older people interface with society and the tools used to study older adults and aging processes. | | | 1 | | | | | | | | | | | | | |
| SYP | 4062 | Sociology | SEXUAL AND REPRODUCTIV E HEALTH | This course examines a number of sexual and reproductive health issues and may include topics such as demographic trends in fertility; the social construction of sexual and reproductive health; reproductive rights; the medicalization of sexual functioning; and the effects of racism, poverty, and sexism on sexual health and reproduction. | | | 1 | | 1 | | | | | | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 1(|) 1 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|---|------------------------------------|--|---|---|---|---|---|---|-----|---|----|-----|----|----|----|----|----|----|----|
| SYP | 4650 | Sociology | SPORTS AND SOCIETY | This course explores the topic of sport from a critical perspective focusing especially on inequalities in gender, race, class, and power. This class jointly examines sports as a social mirror that reflects status inequalities as well as the role of sports in perpetuating social inequalities. | | | | | 1 | | | | 1 | | | | | | | | |
| TTE | 5305 | Civil and Environment al Engineering | TRANSPORTATI ON SYS ANALYSIS | This course provides an extensive introduction for complex multi- modal transportation systems and their components with a focus on transportation planning, economics, modeling, investment, operations and maintenance. Topics covered include network analysis, optimization techniques, demand and supply models, simulation practices, planning and forecasting models and other social, political and economic aspects of the transportation system. Emphasis is given to the tie between the theory and practice with a focus on the sustainability and resiliency of the critical infrastructure. | | | | | | | 1 | 1 | | | 1 | | | | | | |
| TTE | 5501 | Civil and Environment al Engineering | TRANSPORTATI ON ECONOMICS | This course provides an introduction to transportation economics and financial aspects of transportation policy and planning, stressing the demand, supply and other economic issues. Microeconomics concepts that are critical for transportation systems will be extensively studied with a focus on the transportation demand and supply models, discrete choice analysis, cost models, traffic congestion and pricing. | | | | | | | 1 | | | | 1 | | | | | | |
| URP | 3000 | Urban and Regional Planning | INTRO PLANG/URBN DEV | This course introduces planning concepts and the role of planning in formulating policy, meeting critical problems, and shaping the future urban environment. | | | | | | | | | | | 1 | | | | | | |
| URP | 3527 | Urban and Regional Planning | GREEN GLOBAL HEALTH | In this course we explore how nature conservation is necessary for the continuation of life on earth with particular attention on the myriad ways that the natural environment and systems support human health, livelihoods, and wellbeing. We will investigate the numerous ecological theories of health and the evidence based mechanisms by which nature supports human health. We will analyze not only the benefits (i.e. ecosystem services) that the natural environment provides to humans globally but also the local and global effects of human actions on the natural environment, and the disproportionate effects on racial and economic subsets of humanity. | | | 1 | | | | | | 1 | | 1 | | | 1 | 1 | | |
| URP | 4022 | Urban and Regional Planning | COLLECTIVE DECISIONS | This course provides an introduction to planning as a collective decision-making tool, and introduces the concepts of efficiency, equity, and environmental quality as competing bases for public decisions. The course examines tools for contributing to public decisions in varying circumstances, including unitary and diverse decision makers, certain and uncertain environments, and simple and complex goals. | | | | | | | | 1 | | | | | | 1 | 1 | | 1 |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 56 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-----------------------------------|-----------------------------|---|---|---|---|---|----|---|---|---|----|----|----|----|----|----|----|----|
| URP | 4402 | Urban and Regional Planning | SUSTAINABLE DEVLPMNT | This course examines various dimensions of the "sustainable development" paradigm and its local-global policy implications, issues, and controversies with a focus upon North American and Latin America. The course is organized into three modules: 1) environmental philosophies that have influenced the movement; 2) North American approaches to planning for sustainable development; and 3) critical issues of sustainable development in Latin America. | | | | | | | | 1 | | 1 | | | 1 | 1 | | 1 |
| URP | 4404 | Urban and Regional Planning | RIVER BASIN PLANNING | This course introduces river basin management and planning and takes a systematic approach from biological, hydrological, and geopolitical viewpoints. Special emphasis is placed on the planning and management of transboundary (interstate and international) basins. The focus is on world river basin systems as well as on the local Apalachicola-Chattahoochee-Flint basin. Students are introduced to technical concepts and tools, including negotiation and math simulation tools. | | | | | | | | | | 1 | | | 1 | | | 1 |
| URP | 4408 | Urban and Regional Planning | FOOD SYSTEMS PLANNING | This course provides a contextual understanding of food systems in the formation of cities, the impacts of food policy on food systems, and planning responses to the many challenges that arise in relation to the globalized food system. | | 1 | | | | | | | | 1 | | | | | | |
| URP | 4423 | Urban and Regional Planning | ENVRNM PLN/RESOR MGT | This course is a general introduction to the problems of resource management and environmental planning, with an overview of problems and potential solutions and their relation to other public policy areas such as land-use control and regional development. | | | | | | | | | | 1 | | 1 | 1 | 1 | | |
| URP | 4618 | Urban and Regional Planning | PLNG FOR DEV COUNTRY | This course introduces the student to the field of development planning and gives the student exposure to the interplay between theory and practice. Topics include concepts of development, measurement and indicators of patterns of development, rural development, urban development, preparation of development plans, and implementation of development plans. | | | | | | | | | | 1 | | | | | | |
| URP | 4710 | Urban and Regional Planning | TRANS ISUS/TRNS PLNG | This course is an introduction to contemporary U.S. transportation problems, sources of funding, and legislation. Presents the theory and methods employed by planners in the process of resolving transportation problems. | | | | | | | | | | 1 | | | | | | 1 |
| URP | 4811 | Urban and Regional Planning | MULTICULTURA L URBANISM | This course studies past, present, and future urban geographies and the impact urban social and economic policy have on social equity. Students learn the significance of race, gender, ethnicity and Identity in urban development and urban life. | | | | | | | | | 1 | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-----------------------------------|--------------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| URP | 5059 | Urban and Regional Planning | COMM INVOLVE AND PARTICIPATION | This course develops the skills and perspectives for determining why and how to engage citizens in public decisions, moving along the spectrum of participation from informing to consulting, involving, collaborating and empowering. The course provides practical skill development in community engagement processes, design, and methods. | | | | | 1 | | | | | 1 | | | | | | 1 |
| URP | 5122 | Urban and Regional Planning | PLANNING DISPUT RESL | This course focuses on how complex regulatory disputes frequently slow public sector decision making and cripple major private sector investments. Parties to disputes such as location of locally unwanted land uses, setting of air and water quality standards, and evaluation of urban and transportation plans frequently fail to cooperate to achieve the best possible outcome. The course examines why this is so and tries to develop the skills necessary for individuals to improve the outcome in contentious decision making. | | | | | | | | | | 1 | | | | | | 1 |
| URP | 5123 | Urban and Regional Planning | COLLABORATIV E GOVERN | This course prepares students to effectively build censuses and to resolve conflicts involving building permits, locally unwanted land uses, environmental regulations, community visions, projects, programs, allocation of public funds and services, intergovernmental battles, and controversial agency rules. The course also explores constructive alternatives to unilateral or adversarial methods of decision-making that often drain public and private resources unnecessarily, damage important relationships, and either result in less than ideal solutions or fail to resolve the disputes at all. | | | | | | | | | | 1 | | | | | | 1 |
| URP | 5125 | Urban and Regional Planning | PLAN IMPLEMENTATI ON | This course explores topics such as the legal aspects of plan making, implementation politics, policy implementation, interorganization cooperation, and public participation, under the general rubric of plan adoption and implementation strategies. | | | | | | | | | | 1 | | | | | | |
| URP | 5201 | Urban and Regional Planning | PLAN RES METHODS | This course focuses on the social-science research process in planning. Topics include the linkage between theory and research, conceptualization and operationalization of the research problem, study designs, sampling, data sources and collection techniques, the logic of data analysis, as well as computer use. | | | | | | | | 1 | | 1 | | | | | | |
| URP | 5222 | Urban and Regional Planning | PLAN ALT EVALUATION | This course focuses on a systems-analysis approach as a means of analyzing problems and formulating action alternatives. Emphasis is given to techniques of modeling, applied economic analysis, probability and risk, goals achievement, as well as cost benefit and cost effectiveness in the assessment of alternative courses of action. | | | | | | | | | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-----------------------------------|-----------------------------|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| URP | 5272 | Urban and Regional Planning | URBAN INFORMATION | This course is designed to provide students with an understanding of how geographic information systems can be applied to planning practice and research. Students are introduced to the basic concepts, structures, and functions of geographic information systems and their applications to planning research and practice as well as to effective communication of planning information through electronic and print media. | | | | | | | | 1 | | 1 | | | | | | |
| URP | 5312 | Urban and Regional Planning | COMP PLN GROWTH MNGT | This course is an introduction to the problems and needs for growth management and comprehensive planning in U.S. cities, covering public and private perspectives on development and growth management, state and national institutions involved in development, and planning approaches available for meeting the growth management problem. | | | | | | | | | | 1 | | | | | | 1 |
| URP | 5316 | Urban and Regional Planning | LAND-USE PLANNING | This course focuses on preparation of the urban land-use plan including data collection; evaluation of location, market, and environmental factors; and balancing of stakeholder interests. | | | | | | | 1 | 1 | | 1 | | | 1 | 1 | | 1 |
| URP | 5350 | Urban and Regional Planning | PEDESTRIAN COMMUNITI | This course consists of examination and application of proposals for the New Urbanism, including prospects for increasing transit use and pedestrian access through land development code changes and multi- use district designations. | | | | | | | | | | 1 | | | | | | |
| URP | 5355 | Urban and Regional Planning | INT TRANSP PLANNING | This course provides an overview of the broad area of international transportation planning. The course features analyses of a number of specific case studies of transportation planning from around the world, including from Europe, Canada, China, India, Russia, Africa and the developing world, and includes analytical exercises that are relevant to growing international transportation planning challenges. | | | | | | | | | | 1 | | | | | | |
| URP | 5405 | Urban and Regional Planning | RIVER BASIN PLANNING | This course introduces river-basin management and planning and takes a systemic approach from biological, hydrological, and geopolitical viewpoints. Special emphasis is placed on the planning and management of transboundary (interstate and international) basins. The course focuses on world river-basin systems as well as on the local Apalachicola-Chattahoochee-Flint basin. Students are introduced to technical concepts and tools, including negotiation and math simulation tools. | | | | | | | | | | 1 | | | 1 | 1 | | 1 |
| URP | 5407 | Urban and Regional Planning | FOOD SYSTEMS PLANNING | This course provides a contextual understanding of food systems in the formation of cities, the impacts of food policy on food systems, and planning responses to the many challenges that arise in relation to the globalized food system. | | 1 | | | | | | | | 1 | | | | | | 1 |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-----------------------------------|--------------------------------------|--|---|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|
| URP | 5421 | Urban and Regional Planning | ENVIRN PLN RESCE MGT | This course provides a general introduction to the related problems of resource management and environmental planning through an overview of problems, potential solutions, and their relation to methodologies, existing institutions, and other public policy areas such as land-use controls and regional development. Students are expected to become familiar with a series of fundamental concepts from environmental science and engineering, environmental economics, and environmental politics that are important to evaluating alternative courses of action. Students also gain familiarity with the basic analytic approaches to valuing and comparing environmental projects, plans, and policies. | | | | | | | 1 | | | 1 | | | 1 | 1 | | 1 |
| URP | 5422 | Urban and Regional Planning | COASTAL PLANNING | This course examines the planning and management of coastal environments including coastal geomorphic processes, coastal ecosystems, legal structures, and regulatory strategies. Issues include shoreline protection, critical lands management, provision of public utilities, public access, and sea level rise. | | | | | | | | | | 1 | | | 1 | 1 | | 1 |
| URP | 5424 | Urban and Regional Planning | SUSTAINABLE DEVELMNT | This course examines various dimensions of the "sustainable development" paradigm and its local-global policy implications, issues, and controversies with a focus upon North America and Latin America. Organized in three modules: 1) environmental philosophies that have influenced the movement; 2) North American approaches to planning for sustainable development; and 3) critical issues of sustainable development in Latin America. | | | | | | | | | | 1 | | | 1 | 1 | | 1 |
| URP | 5425 | Urban and Regional Planning | METHS ENVIRON ANALYS | This course examines available methods of environmental impact analysis and control. Primary emphasis is placed on water quality, wastewater treatment, and air pollution control, although topics such as noise and solid waste pollution are also considered. | | | | | | 1 | | | | 1 | 1 | | 1 | 1 | | |
| URP | 5445 | Urban and Regional Planning | CLIMATE CH AND COMM RESILIENCE | This course introduces students to key themes, concepts and debates that shape the intersections of climate change vulnerability, disaster risk and adaptive community resilience. | | | | | | | | | | 1 | | 1 | | | | |
| URP | 5540 | Urban and Regional Planning | ECONOMIC DEVELOPMENT | This course analyzes strategies and tools for developing employment and investment in state and local economies. Considers programs targeted to depressed urban neighborhoods, rural communities, downtown commercial areas and specific business sectors. | | 1 | | | | | 1 | | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-----------------------------------|-------------------------|--|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| URP | 5610 | Urban and Regional Planning | INTRO TO DEV PLNG | This course analyzes the problems of developing countries as integral parts of a more general process of the development of human societies on a global scale. The approach to the issues and problems of development is spatial. Such an approach permits consideration of the economic, social, political, and cultural aspects of the development process within an interdisciplinary framework, focusing on urban and regional development as embodiment of concerns with the general quality of human life and the natural environment. The process of development as it goes on in all countries is examined by a focus on the set of conditions leading to problems of development in most societies and on the nature of development paths which have been pursued by other nations as they seek to transform their national spatial structures. | | | | | | | | | | 1 | | | | | | 1 |
| URP | 5611 | Urban and Regional Planning | STRATEGIES FOR LDCS | This course provides an overview of the evolving development policies concerned with the spatial location of people and economic activities. This course encourages students to analyze and critique the social and economic implications of various policies, and to develop alternative strategies for attaining development objectives. | | | | | | | | | | 1 | | | | | | 1 |
| URP | 5616 | Urban and Regional Planning | PROJ PLNG IN LDCS | This course utilizes the project cycle and uses it as a reference point to discuss the following issues: problem identification and basic needs assessment, feasibility studies, selection of most appropriate activities, implementation and evaluation of results. The course also explores the implications for blueprint vs. process oriented approaches to project design and implementations. | | | | | | | | 1 | | 1 | | | | | | |
| URP | 5711 | Urban and Regional Planning | TRNSPORTATN PLNG PRO | This course is an introduction to various aspects of contemporary U.S. transportation problems, sources of funding, and legislation. The course also presents theory and methods employed by planners in the process of resolving transportation problems through investment decision plans. | | | | | | | | | | 1 | | | | | | |
| URP | 5716 | Urban and Regional Planning | TRANSPORT & LAND USE | This course addresses the land use implications of transportation investments and explores strategies for transportation and land use planning that are environmentally sound, socially efficient, and equitable. | | | | | | | | | | 1 | | | | | | |
| URP | 5717 | Urban and Regional Planning | METH TRANS PLNG | This course provides students with a basic hands-on exposure to the principal tools of transportation demand forecasting, including both elasticity-based analyses and the more elaborate techniques incorporated into the urban transportation modeling system (UTMS, also known as the four-step model). | | | | | | | | 1 | | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-----------------------------------|----------------------------|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|----|
| URP | 5731 | Urban and Regional Planning | PLNG COMM INSTRASTRU | This course examines issues and techniques in planning for community infrastructure. Emphasis is placed on capital intensive infrastructure systems, but other services and facilities are covered. Considerable attention is devoted to analyzing variations in demand for infrastructure associated with land use types, intensities, and spatial form. | | | | | | | | 1 | | 1 | | | | | | |
| URP | 5743 | Urban and Regional Planning | NEIGHBORHOO D PLAN | This course focuses on ways in which planning can enable neighborhood residents to enhance the attractiveness of their neighborhood. The course is for planners who work with neighborhood groups or are employed by neighborhood organizations or community development corporations. | | | | | | | | | | 1 | | | | | | |
| URP | 5805 | Urban and Regional Planning | MULTICULTURA L URBANISM | This course deepens students' understanding of the urban cultural, social and economic landscape. Students explore the historical formation of cultural enclaves stemming from immigration, migration, slavery and segregation. The course also explores the formation of spatial organization stemming from policy and social dynamics related to race, ethnicity, gender and sexual identity as well as the present- day implications of multicultural urban spaces. | | | | | | | | | 1 | 1 | | | | | | 1 |
| URP | 5847 | Urban and Regional Planning | GROWTH/DEV OF CITIES | This course is an introduction to the various economic, social, demographic, technological, political, and environmental factors affecting the location, development, and growth or decline of cities, as well as the distribution of activities (industry, commerce, population, public facilities) within them. | | | | | | | | | | 1 | | | | | | |
| URP | 5881 | Urban and Regional Planning | URBAN DESIGN | This course offers students the knowledge and skills necessary to understand and determine the physical planning and design of urban places. Topics cover key issues in contemporary urban design, planning, and architecture, with a focus on the form of the city and current trends in urban design practice. The course also provides students with a critical understanding of the wider social and environmental impacts on the shape, structure, and design of historic and contemporary urban projects and developments. | | | | | | | | | | 1 | | | | | | |
| URP | 6846 | Urban and Regional Planning | SEMINAR URBAN THEORY | This course concentrates on the urban theory component of urban and regional theory, referring to the patterns and processes of development within cities. An emphasis is placed on the theories of human ecology, economics, and geography, and the translation of these theories into a planning perspective. | | | | | | | | | 1 | 1 | | | | | | |

| Subject | Number | Department | Course Title | Course Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 1 | 0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|--------|-----------------------------------|--|--|---|---|---|---|---|---|---|---|-----|---|----|----|----|----|----|----|----|
| URS | 1006 | Urban and Regional Planning | WORLD CITIES | In this course, major world cities are examined in terms of their natural, social, and built environments in order to assess those factors that promote quality-of-life and sustainability. Prospects for future growth and change are considered in light of demographic, cultural, economic, and political trends. | | | | | | | | | 1 | 1 | 1 | | | | | | 1 |
| xxx | 3930r | History | STUDIES IN U.S./EUROPEA N/ASIAN/WORL D/LATIN AMERICAN HISTORY | This course includes examination of a special topic related to U.S./ European/ Asian/ World/ Latin American history. Topics vary. The course may be repeated as topics vary to a maximum of nine semester hours. | | | | | | | | | | | | | | | | 1 | |
| 200 | 4454C | Biological Science | BIOLOGY OF FISHES | This course provides an overview of the systematics, morphology, ecology, behavior, physiology, and life history of the most diverse group of vertebrates on earth, the fishes. It includes conservation and management issues and laboratory exercises balanced with field trips to different northwest Florida habitats, including freshwater springs, salt marshes, seagrass beds, and offshore reefs. | | | | | | | | | | | | | | 1 | | | |