



Incorporating a sustainability module into the College of Family and Consumer Sciences (FACS) 2000 Foundation Course

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Abstract

At the University of Georgia's College of Family and Consumer Sciences (FACS), there is a strong need to proactively rethink how various aspects of sustainability can complement the existing foundation course required for all majors. Within the Body of Knowledge covered in the class, sustainability and wellness are introduced as cross-cutting themes. However, we argue that a separate sustainability module would not only complement but also highly increase the impact of the course. The purpose of the proposed module is to educate students on how sustainability and sustainable development impact their respective majors and their future. The sustainability module introduces the United Nations 17 Sustainable Development Goals (SDG) with a synergistic focus on SDG 3: Good health and well-being and SDG 12: Responsible consumption and production.

The primary objectives of the module are to:

- 1. Develop a critical understanding of the SDG with an integrative focus on good health, well-being, responsible consumption and production to increase students' academic knowledge and enhance their professional and personal lives.*
- 2. Comprehend key concepts and terms such as sustainability and sustainable development; the three pillars of sustainability: social, economic, environmental; and circular economy.*
- 3. Demonstrate through discipline-specific projects focusing on sustainability and wellness of individuals, families, and communities in what ways the SDG impact students' majors across various systems including human, political, economic, food, environmental, and health.*

Approaching the foundational course through a sustainability lens means to teach, incorporate, and use the principles of sustainability in the curriculum to create positive, lasting change that affects the planet, our lives and communities, and our well-being. A sustainability module in the FACS foundation course provides a model "for thinking about the future in which environmental, societal, and economic considerations are balanced in the pursuit of an improved quality of life" (UNESCO, n.d.).

KEYWORDS: UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS, EDUCATION, HEALTH AND WELL-BEING, SUSTAINABILITY, CONSUMPTION AND PRODUCTION

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Introduction

The College of Family and Consumer Sciences (FACS) at the University of Georgia offers several undergraduate majors that include nutritional sciences, housing management, furnishings and interiors, human development and family science, financial planning, and fashion merchandising. At the College, there is a need to proactively rethink how various aspects of sustainability can complement the current foundation course, FACS 2000, required for all majors. The purpose of this paper is to propose a new module to educate students on how sustainability and sustainable development impact their respective majors and their futures and provide a model for other similar institutions. Sustainability is a growing concern in fashion and other industries as well as in personal lives today. The proposed sustainability module introduces the United Nations 17 Sustainable Development Goals (SDG) with a synergistic focus on SDG 3: Good health and well-being (SDG 3), and SDG 12: Responsible consumption and production (SDG 12). Within the Body of Knowledge covered in the class, sustainability and wellness are introduced as cross-cutting themes. However, we argue that a separate sustainability module would not only complement but also highly increase the impact of the foundation course at FACS.

The American Association for Family and Consumer Sciences (AAFCS) defines FACS as “a people-centered field that is focused on the science and art of living and working well in our complex world” (American Association of Family and Consumer Sciences, n.d.). At FACS students benefit from a wide range of educational choices. They are also able to participate in research and outreach programs and are prepared for successful participation in the high-tech global workforce. The mission of FACS is to “provide leadership and support for professionals whose work assists individuals, families, and communities in making informed decisions about their well-being, relationships, and resources to achieve optimal quality of life” (American Association of Family & Consumer Sciences, 2010). Through the lens of sustainability and a module that supports it, faculty can apply disciplinary sciences, technologies, and principles of design and business to their curriculum. The addition of a separate sustainability module can help students become future leaders that promote well-being and responsible consumption and production practices which result in healthier people and communities.

Sustainability and Sustainable Development

At the start of the class, students will be asked to write down, post and so on and discuss what sustainability means to them. They will be asked to contemplate how sustainability relates to the mission of FACS, and how it can be used to have a transformative effect on their major. In order to incorporate sustainability and sustainable development into our educational framework, we must first understand that sustainable development is the pathway to sustainability. Sustainability has been defined by UNESCO (n.d.), as a long-term goal and as

a paradigm for thinking about the future in which environmental, societal, and economic considerations are balanced in the pursuit of an improved quality of life. Sustainable development refers to the many processes and pathways to achieve it (sustainable agriculture and forestry, sustainable production and consumption, good government, research and technology transfer, education and training, etc.).

The United Nations Brundtland Commission on sustainable development in 1987 defined sustainability as “development that meets the needs of the current generation without compromising the ability of future generations to meet their own needs” (Brundtland et al., 1987, p. 8).

There are three pillars of sustainability: environmental, economic, and social. According to Circular Ecology (n.d.):

environmental sustainability means we are living within the means of our natural resources; economic sustainability requires that a business or country uses its resources efficiently and responsibly so that it can operate in a sustainable manner to consistently produce an operational profit; social sustainability is the ability of society, or any social system, to persistently achieve a good social well-being.

As seen in Figure 1, all three pillars must be in balance to achieve true sustainability and result in a circular economy. A circular economy, another important concept, is an economic system aimed at the continual use of natural resources and eliminating and minimizing waste (Department of Economic and Social Affairs, 2019).

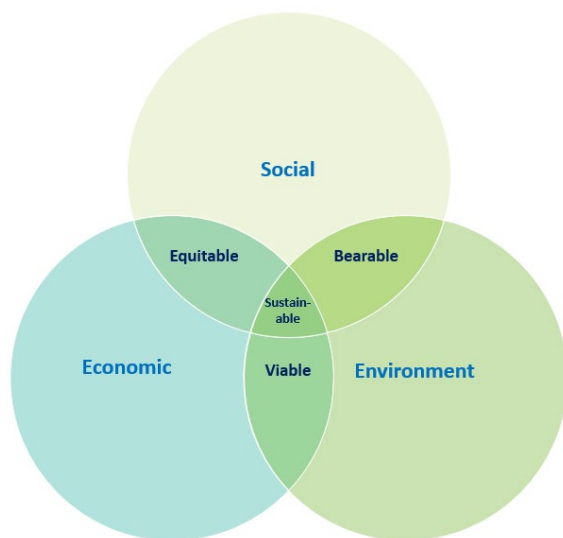


Figure 1 Three Pillars of Sustainability. (Circular Ecology, n.d.)

The United Nations 17 Sustainable Development Goals (SDG)

The module will discuss the 17 SDG including their history and justification, see Figure 2. The SDG website (n.d.), states that the 17 goals are the heart of its 2030 Agenda for Sustainable Development and provide “a shared blueprint for peace and prosperity for people and the planet, now and into the future.” Adopted by all United Nations Member States in 2015, the goals aim to end poverty, improve health and education, reduce inequality, and focus on economic growth.

The goals also call for attention to climate change and highlight the imperative of environmental preservation. The class will discuss and analyze how, if, and in what ways their majors are impacted by the 17 SDG goals. Additionally, students will learn about the International Federation for Home Economics (IFHE) 2022 World Congress entitled, Home Economics: Soaring Toward Sustainable Development. Details about the six of the 17 SDG to be addressed by the IFHE will be extrapolated in more detail when the course launches: SDG 1: No poverty, SDG 2: Zero hunger, SDG 3: Good health and well-being, SDG 5: Gender equality, SDG 6: Clean water and sanitation, and SDG 12: Responsible consumption and production. The class will discuss these six goals chosen for the IFHE conference with a synergistic focus on SDG 3 and SDG 12, and how they relate to FACS and their respective majors.

The IFHE holds consultative status with the United Nations. As stated on their website, “We strive to achieve a sustainable living for all, advocating education and research on the responsible management of resources at consumer and household level” (International Federation for Home Economics, n.d.-b). The SDG and FACS’s diverse disciplines offer an integrated approach that “allows us to address multi-dimensional economic, social and

ecological aspects that impact every-day living and to offer specific interpretations of important SDGs” (International Federation for Home Economics, n.d.).



Figure 2 The United Nations 17 Sustainable Development Goals. (United Nations Department of Economic and Social Affairs, n.d.)

The FACS Body of Knowledge and Cross-cutting Themes

As part of the module, the FACS Body of Knowledge (BOK) will be reviewed while highlighting the cross-cutting themes and how they link all FACS departments with sustainability, sustainable development, SDG 3, and SDG 12. In FACS, the BOK is the current foundation for the field, which integrates relevant concepts to consumers, with the service of individuals, families, and communities (Anderson & Nickols, 2001). While the concept of sustainability is included in the BOK in the FACS 2000 course, a separate sustainability module could inform all programs within the College of FACS and supplement the current BOK. From the inception of FACS professions in 1918 to the present, family and consumer sciences have faced changing social, economic, technological, and societal conditions (Nickols et al., 2009). Sustainability cuts across all areas of life and career development. FACS education has the potential to address the social, economic, and environmental challenges of the 21st century through the lens of sustainability. With the growth in diversity and the transformation of the cultural landscape, a focus on sustainability will broaden the scope of research and practice among FACS students.

The BOK model for family and consumer sciences presents three critical components: core concepts, integrative elements, and five cross-cutting themes. These three components also interact and have a synergistic interrelationship with each other and the entire BOK. Because the cross-cutting themes represent social trends and issues of the zeitgeist, as well as historical continuity, they also must address a constantly changing environment (Nickols et al., 2009). The theme, “resource development and sustainability,” lies within the five cross-cutting themes. The other four are capacity building, global interdependence, technology (appropriate use), and wellness. As part of the proposed module, instructors could reiterate these five cross-cutting themes and integrate “sustainability” and SDG 3 and SDG 12 within each theme. For example, in the cross-cutting theme of capacity building, acquiring knowledge and skills in sustainability and sustainable development, could address the imperative to proactively respond to societal (diversity, well-being) and environmental (responsible consumption and production) challenges. Under global interdependence, SDG 12 addresses the impact of responsible production and consumption on the planet and its effects on others in the world. Another discussion could focus on how technology and its appropriate use influences the way we connect and interact.

Technology, like sustainability, has ethical, social, and economic consequences. A discussion on SDG 3 and technology could address how advances in science and technology shape and affect the well-being of individuals, families, and communities. Additionally, SDG 3 addresses

the cross-cutting theme, wellness. On this account, instructors can highlight the issues of food security, the relevance of adequate nutrition, appropriate exercise, access to quality healthcare, and compassionate and respectful learning environments. Students could contemplate the importance of universal access to safe water, clean air, and proper sanitation facilities. A conversation on social sustainability and psychological health could also lead to discussions on how one can be best protected from abuse, exploitation, and violence. By highlighting SDG 3 and SDG 12, we could also talk about the imperative to design healthy homes for the life course development of an aging and diverse population, among others.

Sustainability is concerned with protecting the environment, encouraging sustainable practices, properly managing resources and well-being across the lifespan. It also encourages a deep engagement with public policy. Sustainability, SDG 3, and SDG 12 interrelate all cross-cutting themes and underline their significance to all FACS departments and majors.

The Impact of Sustainability on Individual FACS Departments

Incorporating sustainability into the required introductory FACS course can guide students to innovate sustainable solutions into their disciplines. For the purpose of this proposal, we are using the four departments at the University of Georgia's College of Family and Consumer Sciences, the Department of Human Development and Family Science (HDFS), the Department of Foods and Nutrition (FDN), the Department of Financial Planning, Housing and Consumer Economics (FHCE), and the Department of Textiles, Merchandising and Interiors (TMI). To help us rethink the global environmental, economic, and social systems, the module will demonstrate how sustainable thinking impacts choices in education, finances, career, consumption, well-being, and personal life. Below we explain how incorporating a sustainability module into the introductory course with a synergistic focus on SDG 3 and SDG 12 can impact these four departments.

Department of Human Development and Family Science (HDFS)

Undergraduate students majoring in HDFS study individuals, families, and communities. They study the lifespan and family development within social, cultural, and historical context. Human lives and job satisfaction are centered on our well-being. Applying sustainability into HDFS sets the foundation for students to challenge assumptions about educational needs and provides education of advocacy services for families and children to function more effectively. Self-sufficient families, adult education, youth programs, and hospital work are all areas where a focus on SDG 3 and SDG 12 can be beneficial. For example, child development courses could analyze public policies on the economic and environmental implications of young families using cloth vs disposable diapers (Thompson et al., 2012). A discussion can be led on sustainable community collaborations that can support healthy family and marriage relationships. As stated by Futris (2007), "Making positive and sustainable impacts on current and future marriages is more likely to occur when the community is actively engaged" (p.1). The involvement of the community can provide quality programs that serve not only marriages but all relationships, by identifying the needs and challenges of the community from an ecological and developmental perspective. Futris defines program sustainability as "the capacity of programs to provide continued benefits to families and communities" (p. 2). This is contingent on fostering sustainability that relies on community collaborations and networks that incorporate action into everyday life. Marriage and family relationships in low-income families may be impacted by risks that inhibit healthy relationships, health and wellness concerns, employability, and financial status. Community collaborations may involve government, cooperative extension, faith communities, family services, public health, school youth programs, community action agents, and more, which all serve to develop an infrastructure that supports well-being and healthy relationships.

Department of Foods and Nutrition (FDN)

In FDN, students prepare for careers in health care, government, industry, and education. Within the various majors of the department, dietetics majors can apply their degrees toward opportunities in health care, sports nutrition, schools, food services, government, public health, and industry positions. Dietitians who work in these occupations impart educational programs that focus on nutrition and public health. Healthy food intake plays a significant role in well-being, disease prevention, and overall health. Sustainability and SDG 3 play a critical role in food production. A healthy and sustainable food future depends on global collaborative efforts. Sustainable diets respect and preserve the ecosystem, have low environmental impact, and are accessible, affordable, and nutritionally adequate for all (Harvard T.H. Chan School of Public Health, n.d.). Our environment and carbon footprint are greatly affected by food consumption and farming practices. Through the lens of SDG 12, FDN students could consider the impact of the carbon footprint of foods shipped from around the world, compared to locally grown foods (Thompson et al., 2012). From Pontikis et al. (2011), “The U.S. food production system uses about 50% of the total U.S. land area, approximately 80% of the freshwater, and 17% of the fossil energy used” (p. 44). SDG 12 can help students understand that such heavy dependence on energy and natural resources is not sustainable. Students in FDN can engage in research and debates about sustainable food systems, environmentally-friendly farming practices, and collaborate with communities and organizations that prioritize sustainability.

Department of Financial Planning, Housing and Consumer Economics (FHCE)

FHCE provides undergraduates with an education that focuses on improving the economic and financial well-being, and quality of life for individuals, families, and communities. In the case of consumer economics majors, an intentional focus on sustainability and SDG 12 can positively influence consumers’ well-being through policy making, education, and product innovation. Consumer economics allows students to discern the strong connection between a sustainable lifestyle and judicious choices in consumption. Sustainability issues greatly affect consumer behavior. Consumption choices also have repercussions in terms of labor and trade practices. Immersing themselves in sustainability principles, students can learn that being “green” does not always cost more if one opts for products that offer energy savings. By applying this knowledge, students can conduct cost/benefit analyses for decisions based on their research (Pontikis et al., 2011). Understanding the product life-cycle can help educate consumers to make informed decisions. Encouraging students to examine consumption through the lens of sustainability and SDG 12 will help students identify long-term solutions for a more viable environment (Thompson et al., 2012).

Department of Textiles, Merchandising and Interiors (TMI)

At TMI, students are prepared for careers in retail, fashion merchandising, residential design, and the manufacturing industry. Fashion, clothing, and textiles affect everyone because we all wear clothing and accessories and require shelter. Educators, consumers, manufacturers, and governments all have a responsibility to make sustainability a priority. Much of our natural resources are not renewable. FACS and TMI students have to learn to consider this when making decisions relating to clothing and interiors (Thompson et al., 2012). The incorporation of sustainability and SDG 12 provides TMI students with the proper framework to make responsible decisions concerning environmental issues in their future careers in retail, manufacturing, merchandising, design and product development, or market research. They also learn about product lifecycles, and how raw materials are processed, manufactured, and transported to retail for consumers’ end-use. All these steps and the eventual disposal of unwanted products greatly impact energy use. Furnishings and interiors (FI) students have the capacity to affect everyone because we all need shelter and the built environment for our homes, work, and social needs. FI students can learn to identify sustainable choices in materials for healthy, economical, and environmentally-friendly spaces. Understanding sustainable options in flooring

choices, for example, can greatly impact the well-being of individuals and communities, the environment, and the economy (Thompson et al., 2012). In the case of TMI students, imparting a sustainability mindset has the potential to influence change by steering students towards design choices aimed at longevity and durability. TMI students will learn to opt for manufacturing and labor choices that reduce harmful environmental impacts and eliminate unethical practices (Pontikis et al., 2011).

A FACS education prepares students to be successful in today's world. Fletcher & Tham (2019), "propose planet before industry as a radical idea in which the health and survival of our planet earth is given precedence over business interests" (p. 31). Sustainable development requires transformative changes in the practices of all involved: designers, manufacturers, marketers, consumers, and educators (Fletcher & Tham, 2019). As profit relates to consumption, consumers need a vision for sustainable practices that begins with their own consumption and well-being practices.

When FACS students incorporate sustainability through the everyday lens of their area of study, they become aware of the positive impacts they can make on the social, economic, and natural environment. They learn how choices in processes, materials, manufacturing practices, and consumption behaviors and habits, all affect individuals, families, and communities (Fletcher, 2008). A focus on good health, well-being, and responsible production and consumption in FACS 2000 promotes sustainability for future generations that protects the environment, workers, and communities.

Additional Opportunities for Sustainability Education

The sustainability module will also inform students about how they can get more involved in their academic, career, and personal lives. To achieve this goal, links to the institution's sustainability programs, certificates, events and so on will also be provided. For example, University of Georgia's Sustainability Certificate equips students with the skills to make significant, systemic changes in their communities, paving the way for a more sustainable future. The Sustainability Certificate is a 17-hour program, offered at the undergraduate and graduate levels. It emphasizes interdisciplinary learning through the integration of the social, economic, and environmental spheres of sustainability and the application of this learning to real-world sustainability challenges (Sustainable UGA, n.d.).

Assessment

After completing the module, or at the end of the class period, students are asked to define sustainability again, post their responses from the beginning prompt, and post what has changed in their thinking after the completion of the module. This can be done as a small group discussion for respective majors or as a class discussion, using an electronic medium such as Jam Board, a shared file, or on the college's learning system's discussion board. If done on an online discussion board, students respond to minimum two other students' post.

Additionally, at the end of the module, students will be presented with an essay/ discussion assignment in which they will explain what sustainability means to them and how sustainability and sustainable development can be used to impact their major. They will also answer how and in what ways SDG 3 and SDG 12 impact their majors.

Table 1 A potential outline of the FACS, Sustainability & Sustainable Development Module

Module Description	
1	Class discusses what sustainability means to them, how it ties into the mission of FACS, and how sustainability can be used to impact their major.
2	Definitions:

- Sustainability and sustainable development from the United Nation's Brundtland Commission, 1987
- Three Pillars of Sustainability: Environmental, Economic, and Social
- Circular Economy

3 Introduce United Nations 17 Sustainable Development Goals (SDG): history and justification.

- IFHE 2022 World Congress, *Home Economics: Soaring Toward Sustainable Development*; its focus on six SDG. SDG 1: No poverty, SDG 2: Zero hunger, SDG 3: Good health and well-being, SDG 6: Education, SDG 5: Gender equality, SDG 6: Clean water and sanitation, SDG 12: Responsible consumption and production.
- Class discusses six goals chosen for the IFHE conference and how they relate to FACS.
- Provide synergistic focus on SDG 3: Good health and well-being, and SDG 12: Responsible consumption and production

4 Review the FACS Body of Knowledge and cross-cutting themes and discuss how they link FACS with sustainability, sustainable development, and SDG 3 and SDG 12.

5 How sustainability, SDG 3, and SDG 12 impact individual FACS departments and how sustainable thinking impacts one's choices in education, career, consumption needs, and well-being/personal life.

- Human Development and Family Science (HDFS) and Sustainability. Examples of applications
- Foods and Nutrition (FDN) and Sustainability. Examples of applications
- Financial Planning, Housing and Consumer Economics (FHCE) and Sustainability. Examples of applications
- Textiles, Merchandising and Interiors (TMI) and Sustainability. Examples of applications.

For example, "because we all [wear clothing to go out in the world], [fashion] must be at the center of the conversation when talking about sustainability."

6 Provide examples of how students can get more involved with sustainability for career and personal life: links to college sustainability programs, certificates, events, etc.

7 At the end of the module students post/discuss their definition of sustainability again. They break out into small groups, etc. or post their responses from the start and after the completion of the module on the learning system discussion board. They also respond to at least two other students to assess how their sustainability competencies changed.

8 End of module, present essay/discussion assignment:

- What has changed about what sustainability means to you and how sustainability can be used to impact your major?
- How and in what ways do SDG 3: Good health and well-being, and SDG 12.: Responsible consumption and production, impact their majors.

Source: Authors, 2022

Conclusion

A more sustainable planet affects everyone. Approaching the required FACS foundational course through a sustainability lens and the SDG means to teach, incorporate, and use the principles of sustainability and sustainable development in the curriculum. This has the potential to create positive, lasting change that affects the planet, our lives, communities, consumption and production, and our well-being. FACS is committed to individuals, families, and communities within environmental contexts and across the lifespan. With an integrative, synergistic, and holistic focus, FACS recognizes change and evolution over time in areas such as clothing and consumption needs, housing, economics and finances, well-being, and family structures (Anderson & Nickols, 2001). A sustainability module in the FACS foundation course provides a model "for thinking about the future in which environmental, societal, and economic considerations are balanced in the pursuit of an improved quality of life" (UNESCO, n.d.) for all.

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