Wilkes University Curriculum Committee

PROPOSAL SUBMITTAL FORM

Directions:
- Use this set of forms for all proposals sent to the Curriculum Committee.
- Pages 1-3 of this document are required. Any unnecessary forms should be deleted from the packet before submissions. If multiple forms are needed (course addition, course deletion, etc), simply copy and paste additional forms into this packet.
- Note that all new programs (majors and minors), program eliminations, significant program revisions and all general education core revisions must be reviewed and approved by the Provost and Academic Planning Committee (APC) prior to submission to the Curriculum Committee. The Provost will make the decision if a program revision requires APC review.
- Completed and signed forms are due no later than the second Tuesday of every month. Submit one signed original hard copy and a scanned electronic copy with all signatures to the Chair of the Curriculum Committee.

1. Originator: Names: Ruth C. Hughes and Marleen A. Troy
   Department: Sidhu School of Business and Leadership (Hughes) and Environmental Engineering and Earth Sciences Dept. (Troy)

   Phone and email: Hughes: X 4703, ruth.hughes@wilkes.edu
                    Troy: X 4615, marleen.troy@wilkes.edu

2. Proposal Title: Minor in Sustainability Management

3. Check only one type of proposal: (double click on the appropriate check box and change default value to “checked”).
   □ New Program. (Major or Minor Degree Programs). This requires prior review and approval by the Provost and APC.
   □ New Concentration, Track, or Certificate. The Provost determines if review and approval by APC is necessary.
   □ Elimination of Program. (Major or Minor Degree Programs). This requires prior review and approval by the Provost and APC.
   □ Elimination of Concentration, Track, or Certificate. The Provost determines if review and approval by APC is necessary.
   □ Program Revision. Significant revisions to a program require review and approval by the Provost. The Provost determines if review and approval by APC is necessary.
   □ General Education Revision. Submissions only accepted from the General Education Committee (GEC). Must be reviewed and approved by the Provost.
   □ Creation of new departments, elimination of existing department. This requires prior review and approval by the Provost and APC.
   □ Course additions or deletions not affecting programs (such as elective courses, transition of “topics” courses to permanent courses).
   □ Change in course credit or classroom hours.
Incidental Changes. Includes changes in course/program title, course descriptions, and course prerequisites. (Although these changes do require approval by the Curriculum Committee, they do not go before the full faculty for approval).

4. Indicate the number of course modification forms that apply to this proposal:

   ______ Course Addition Form (plus syllabi)
   ______ Course Deletion Form
   ______ Course Change Form

The minor in Sustainability Management is comprised of currently existing courses.

5. Executive Summary of Proposal.

   Briefly summarize this proposal. The breadth and depth of this executive summary should reflect the complexity and significance of the proposal. Include an overview of the proposal, background and reasoning behind the proposal and a description of how the proposal relates to the mission and strategic long-range plan of the unit and/or university. For incidental changes a one or two sentence explanation is adequate.

The Sidhu School of Business and Leadership and the Environmental Engineering and Earth Sciences Department are proposing to jointly offer a minor in sustainability management for students who wish to enhance their understanding of sustainability management. Sustainability is smart management of natural resources toward the end results of efficiency and profitability. Sustainability management is becoming a growing focus for many organizations that strive to be more environmentally conscious and socially responsible. Leaders in every industry have recognized the value sustainable measures bring to the world, and to their bottom line. This minor incorporates the four courses of the existing Sustainability Management Certificate program with other existing courses to offer the 18 credit minor in sustainability management. Students majoring in management, sports management, business administration, earth and environmental sciences and environmental engineering will be able to complete this minor with proper planning.

6. Other specific information. (Not applicable for incidental changes.)

   What other programs, if any, will be affected by this proposal? Describe what resources are available for this proposal. Are they adequate? What would be the effect on the curriculum of all potentially affected programs if this proposal were adopted? Include any potential effects to the curriculum of current programs, departments and courses.

   This minor, which was created using existing courses will allow students to enhance their skill sets in sustainability management, an area that has been identified for continued job growth.
7. Program Outline. (Not applicable for incidental changes).

A semester-by-semester program outline as it would appear in the bulletin for a new program or any modified program with all changes clearly indicated.

Because of the varied nature of majors that this minor will serve, a student should express interest to their advisor by the beginning of their sophomore year of their interest in completing this minor to ensure proper planning as there are several pathways to complete the minor. Key to successful completion of the minor is ensuring that SUS 401, SUS 402, SUS 403 and SUS 404 are taken sequentially starting in the sophomore or junior year. Students will also need to contact the coordinators of the minor program of their interest in completing the minor.
8. Signatures and Recommendations. (please date)

- Signatures of involved Department chair(s) and Dean(s) indicate agreement with the proposal and that adequate resources (library, faculty, technology) are available to support proposal.
- If a potential signatory disagrees with a proposal he/she should write "I disagree with this proposal" and a signed statement should be attached to this submission.

Dr. Sid Halsor, Signature Date
Chair of the Department of Environmental Engineering and Earth Sciences
Department chair(s) of all potentially affected programs

Dr. Dean F. Frear, Signature Date
Chair of the Department of Accounting, Finance and Management
Department chair(s) of all potentially affected programs

Dr. Ge Xiao, Signature Date
Chair of the Department of Entrepreneurship, Hospitality Leadership, Leadership and Marketing
Department chair(s) of all potentially affected programs

Dr. Abel Adekola, Signature Date
Dean, Sidhu School of Business & Leadership
Dean (s) of any potentially affected College/School.

Dr. William B. Hudson, Signature Date
Dean, Science and Engineering, College of Science and Engineering
Dean (s) of any potentially affected College/School.
Ms. Susan A. Hritzak  
Registrar

Dr. Anne A. Skleder  
Senior Vice President/Provost
(For new programs, significant revisions and revisions to the General Education Program revisions only).

Provost should check here ✅ if this proposal is a program revision AND the significance of the revision requires review and approval by APC prior to Curriculum Committee.

Dr. Linda A. Winkler  
Chair, Academic Planning Committee. For new programs, program revisions sent via the provost. Signature indicates that the proposal has been reviewed and approved by APC.
Attachment 1

Current Trends in Hiring Sustainability Professionals
Current Trends in Hiring Sustainability Professionals

Dorothy Fisher Atwood, ISSP-CSP, Kristen Coperine, IMBA*, LEED GA, and Maureen Hart

Abstract

The International Society of Sustainability Professionals (ISSP) conducted a survey of hiring managers to determine what skills organizations identify as important when hiring sustainability professionals. The survey was distributed in English internationally via e-mail with a survey link. Analysis of the 213 responses provides insight on desired skill sets, the impact of education and certifications on hiring decisions, and future trends for hiring sustainability professionals. The results show that soft skills, such as communication and influencing change, and the hard skills of strategic planning and project management are the most important. Other desirable skills cited were team building, problem solving, sustainability reporting, and systems thinking. Many respondents commented that passion, commitment, and experience are also important. Education level and certifications are helpful for distinguishing applicants, especially in this competitive market. The skills identified as important by hiring managers are in alignment with ISSP’s Survey Report and its recently launched certifications, ISSP-Sustainability Associate and ISSP-Certified Sustainability Professional. For those sustainability professionals newly entering the field, most organizations responded that they have recently hired sustainability professionals and have plans for additional hires.

Introduction

The International Society of Sustainability Professionals (ISSP) was interested in evaluating the usefulness of its recently developed sustainability professional credentials, the ISSP-Sustainability Associate and ISSP-Certified Sustainability Professional. These credentials are based on the competencies required for sustainability professionals as determined in the ISSP Competency Survey Report and subsequent development of the sustainability practitioner job task analysis created by a multi-stakeholder group of subject matter experts. An open question, however, remained: Do the ISSP credentials align with what organizations are seeking when hiring a sustainability professional? In other words, they needed to know if the knowledge, skills, and attributes being tested by the ISSP certification are in fact the ones that organizations are actually looking for; so, in the summer of 2015, ISSP conducted a survey of personnel who hire sustainability professionals. The goal of the survey was to determine what skills and attributes organizations are seeking when hiring a sustainability practitioner.

The hiring survey information was designed to serve as useful guidance for ISSP members, both aspiring and seasoned practitioners, looking to enhance their competencies as well as provide insight into learning objectives for sustainability train-
ing and educational programs. The survey provides a snapshot into the emerging field of sustainability and indicates future hiring trends and training needs.

**Methodology**

ISSP targeted sustainability hiring managers and human resource professionals for this research. The survey was deployed in English to over 100,000 people between July 2015 and September 2015 through a variety of mechanisms: 1.) direct e-mail to ISSP members with survey link, 2.) posts to ISSP, Sustainability Professionals, and other LinkedIn networks with survey link, 3.) direct e-mail invitations from ISSP’s international board, and 4.) via partner organizations (e.g., Association for Advancement of Sustainability in Higher Education[AASHE]).

Two hundred thirteen employers responded to the survey. The survey included 17 questions, with topics ranging from general skill sets desired, educational requirements, importance of certifications, and respondent makeup. The final question asked respondents to add comments on any competencies seen as missing from the survey. Nearly one-third of respondents left comments, from a few words to paragraphs. These qualitative statements were coded and used to supplement the survey responses.

**Profile of Respondents**

ISSP was interested in reaching a large variety of organizations across a broad geographic area. Figure 1 shows the distribution of organizations across industry sectors. The organizations represented by the sustainability hiring managers who responded are fairly evenly distributed. The largest percentage (~25%) of respondents came from the sustainability consulting sector, followed by manufacturing (20%), education (18%), services (14%), and government (12%).

Figure 2 depicts the geographic distribution of the survey respondents. Over half the respondents are from the United States and Canada. However, there were responses from many countries around the world, including significant representation...
from Asia-Pacific (13%) as well as Europe (9%) and Africa (7%).

A large majority of respondents (68%) stated that they were sustainability professionals who manage and hire other sustainability professionals (Figure 3). It is understandable that the sustainability professionals within an organization would be involved in hiring additional staff. It is also encouraging to see that organizations are seeing value in larger sustainability staffs instead of the all-to-common sustainability department of one.

Just over half of the organizations have current staffs of fewer than five, indicating that departments are still small (Figure 4). However, almost 15 percent of the organizations have sizable sustainability staffs of more than 21. It is likely that these larger organizations specialize in sustainability consulting work and do not maintain large sustainability departments for their internal efforts.

**Results**

A key part of the survey explored the most important skills that hiring managers are seeking. Respondents were asked to choose the top five hard skills (technical skills such as mathematics, engineering, science, and analysis) and top five soft skills (interpersonal skills such as communication, leadership, and teamwork) from listed options including a category for other.

Figures 5 and 6 show the results of the ranking. The top four hard skills ranked over 50 percent: strategic planning, project management, sustainability reporting, and systems thinking. These results were in close alignment with the ISSP 2010 Competency Survey Report where the three top skills were strategic planning, systems thinking, and project management. It is interesting to note that in the last five years the prevalence of sustainability reporting of all types has grown tremendously. Scientific expertise, risk assessment, and green building were lower on the list, which may indicate that while technical skills are desired, they can be taught in training or contracted.

The top four soft skills were all over 60 percent—communication, influencing change, problem solving, and team-building/collaboration. Motivating and inspiring others, and also networking, ranked over 50 percent. This is very consistent with the ISSP 2010 Competency Survey Report where the top soft skills were identified as communication, problem solving, and motivating/inspiring.

When asked to name the academic majors of current sustainability professionals in their organizations, environmental science, sustainability, and business were the most common. Interestingly, fewer than 20 percent of respondents stated that sustainability professionals had majored in communications or marketing, even though those skills were stated as highly desirable. (See Figure 7.)

Most respondents indicated that the minimum educational level accepted was a bachelor's degree (>60%), with one-third requiring at least
a master's degree (Figure 8). The comments, however, showed the complexity and flexibility of organizations when seeking new hires (see Figure 14 for examples of comments). Several respondents stated there was no real minimum education level required if the skills, passion, and experience were there.

On the other end of the spectrum, because there are so many highly qualified applicants available, a bachelor's degree was often not enough to make it as a final candidate in the selection process. Therefore, a master's degree was the functional requisite educational level. As one respondent wrote: "Although job postings for our sustainability office state bachelor's + 2 years' experience as a minimum requirement, everyone in our sustainability department has at least a master's degree." It can be inferred from this that successful job applicants need both academic, high-level critical thinking and hands-on, practical ability. There may also be a difference in response between organizations hiring sustainability professionals for an internal sustainability office and organizations that hire professionals to do external consulting.

Most organizations do not use as a hiring criteria certifications such as LEED accreditation, Certified Energy Manager, or University Sustainability Certificates (Figure 9). This may be due to both the scope of sustainability specializations and lack of overarching general sustainability certification at the time of the survey. However, a common comment for this question was: "No (a specific certificate or certification was not required), but it would help (in the selection process)," indicating that although there was no specific requirement, having one or more certifications was an advantage in distinguishing among applicants.

Although candidates for a sustainability position may not be required to come into the organization with specific certificates or certifications, 20 percent of respondents stated that their organization eventually would require specific certifications. (See Figure 10.) That statement is in line with the attitude of hiring personnel with the intention of further training after hire.

When asked, "If a professional certification for sustainability professionals existed, how likely would it be that your organization would use it as a criteria for hiring sustainability professionals?" the average response leaned toward "most likely" (Figure 11). This confirms the demand for a sustainability certification for the purpose of hiring.
Because sustainability is still an emerging field, employers do not require specific certificates or certifications, but rather use them as indicators of specialized knowledge areas. However, more companies and organizations may be likely to use an overarching sustainability certification as a hiring criteria if it is robust and can be effectively utilized in multiple industries.

**Current and Future Hiring**

More than 60 percent of respondents stated that they have hired a sustainability professional in the last year, which is encouraging for the industry (Figure 12). Of those that have not hired sustainability professionals, there is an intent to hire one at some point in the future.

Looking into the future, 39 percent of respondents plan to hire a sustainability professional in the next six months, while another 26 percent plan to hire in the next year (Figure 13). This indicates that there may be a pull to hire more sustainability professionals in the longer term as momentum and understanding of the business value of sustainability and sustainability professionals increases. Once there is a sustainability presence in an organization with one or more sustainability professionals spearheading efforts, they substantiate the value of hiring additional sustainability staff.

**Conclusion**

The results of this survey highlight trends within the field regarding the skills, education levels, and credential requirements for new hires.

**Author Disclosure Statement**

No competing financial interests exist.

- New hires must have both hard and soft skills, great communication, and the ability to inspire and lead change.

- Formal education is important—coupled with experience and passion. As one survey respondent commented: “Passion and ability to influence change are key.” However, whether learned in the classroom or through work or volunteer experience, having a solid understanding of what sustainability is, and the ability to keep learning is most important.

- Certification is nice to have at this point in time. As credentials
become proven and more common, they will likely become more important. Although there are industry and position-specific specialized certifications (LEED, etc.), there is a growing need for a broad sustainability certification that lays the foundation for sustainability—a foundation that specialized certifications can bolster.

- The skills covered in the ISSP certifications (and identified in the competency study) are in alignment with those skills that managers are looking for when hiring sustainability professionals. The most important skills can be summarized as:

  - Change management as key, with the specific skills of strategic planning, project management, influencing change, and systems thinking

  - Communication expressed through an understanding of the broad topics within sustainability, the ability to explain concepts to stakeholders, and to then inspire action. One survey respondent commented: “We can train them in subject matter, but we cannot train them to be good communicators.”

  - Business acumen, and particularly the ability to put sustainability into business language to show its value throughout the organization.
**Author Disclosure Statement**

No competing financial interests exist.

**References**


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**Figure 13.** Plans for future hires

- Within next 12 months: 26%
- Within next 6 months: 16%
- Within next 3 months: 23%
- No plans currently to hire sustainability: 34%

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**Figure 14.** Sampling of quotes from survey respondents

- "Project management, innovation, try and try again, and engagement are most important."
- "It is of critical importance that a sustainability professional is able to engage others on a voluntary basis, using a grassroots approach."
- "Education is important, but life experience, passion, and commitment is a key in the selection process."
- "With the growth of sustainability programs at the undergrad and master's level, we are seeing more and more qualified candidates with master's degrees, PhDs, and very interesting work experience. It's competitive!"
- "An ISSP-CSP certification wouldn't automatically put someone on top of the list of candidates, but it would definitely help tip the scales in differentiating from other potential candidates."
- "The key to hiring a sustainability professional is finding the person with the right attitude and aptitude, along with a passion for change, inclusion, and flexibility in the work environment."
Attachment 2

Sustainability Management Minor Summary
MINOR IN SUSTAINABILITY MANAGEMENT

The Sidhu School of Business and Leadership and the Environmental Engineering and Earth Sciences Department are jointly offering a minor in sustainability management for students who wish to enhance their understanding of sustainability management. Sustainability is smart management of natural resources toward the end results of efficiency and profitability. Sustainability management is becoming a growing focus for many organizations that strive to be more environmentally conscious and socially responsible. Leaders in every industry have recognized the value sustainable measures bring to the world, and to their bottom line.

**Minor Highlights:**

- Students will become familiar with the terminology and implementation strategies for sustainability management and learn about "sustainability champions."

- Students will learn about the latest sustainability management tools and how to assess an organization's current status and target areas for improvement.

- Students will learn how to communicate and disseminate information, both internally and externally, about an organization's sustainability programs and create implementation-ready initiatives and programs.

- If a student does not choose to obtain the minor, completion of the four courses SUS 401 (or equivalent), SUS 402, SUS 403 and SUS 404 will allow you to obtain a certificate in sustainability management. A grade of 3.0 or greater in all four courses is required for receipt of the certificate.

The following four core courses are required for the minor. They are all three credits each and are offered on-line via Desire-2-Learn. A grade of 3.0 or greater in all four courses is required for receipt of the minor.

**Sustainability Management Core Courses* (all required)**

**SUS 401 – Introduction to Sustainability (cross-listed with ENT 398 and MGT 398)**

This course serves as an introduction to the concept of sustainability and will investigate why knowledge of sustainability issues and initiatives is an important business management and operational tool. This course is the first in a series of four courses in Sustainability Management. There are no pre-requisites for this course.

**SUS 402 – Metrics of Sustainability**

Metrics of sustainability are the tools and procedures that are utilized to measure the impact and progress of a sustainability management program. These metrics are important because they enable goal setting and facilitate the adoption of sustainable practices. In this course current sustainability reporting and tracking systems will be studied. This course is the second in a series of four courses in the Sustainability Management. SUS 401 (or equivalent) is a pre-requisite for this course.

**SUS 403 – Sustainability Implementation**

Students will learn about implementing sustainability management systems through an in-depth study of a manufacturing facility. Key topics to be studied include: setting sustainability goals, development of an environmental policy statement, development of sustainability metrics and sustainability reporting. This course is the third in a series of four courses in Sustainability Management. SUS 402 is a pre-requisite for this course.
SUS 404 – Industry-focused Sustainability
In this course students will perform an in-depth study of sustainability standards and practices in the context of a specific industry. This course is the last in a series of the four core courses in Sustainability Management. SUS 403 is a pre-requisite for this course. Note – ENT 384 or ENV 384 can be substituted for SUS 404 with permission of the SUS Minor Coordinators.

* - Wilkes University is an International Society of Sustainability Professionals (ISSP https://www.sustainabilityprofessionals.org/) educational partner and is a recognized leader in delivering sustainability-related educational opportunities to current and aspiring sustainability professionals. Students who complete the four Sustainability Management Core Courses will be prepared to sit for ISSP exams.

Course Requirements for the Minor in Sustainability Management
Sidhu School of Business and Leadership
Environmental Engineering and Earth Sciences Department
2017 – 18’ Wilkes University Bulletin

REQUIREMENTS
1. Successful completion of the 12 credit Sustainability Management Certificate Program core courses: (SUS 401 or equivalent, SUS 402, SUS 403 and SUS 404) with a grade of 3.0 or higher.
2. A minimum of 18 credits in approved courses (i.e. 6 of the 18 credits from the approved course – list below).
3. Minimum grade of 3.0 in courses toward minor
4. Completion of a “Declaration of Minor” form

Approved courses that qualify towards the Sustainability Management Minor:

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<th>Course</th>
<th>Title</th>
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<th>Notes</th>
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<tr>
<td>EES 105</td>
<td>Planet Earth – The Global Environment</td>
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<td>MGT 298</td>
<td>Introduction to Supply Chain Management</td>
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<td>MGT 352</td>
<td>Production and Operations Management</td>
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<td>SM 355</td>
<td>Facility Management</td>
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<td>EES 210</td>
<td>Global Climate Change</td>
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<td>EES 240</td>
<td>Principles of Environmental Science and Engineering</td>
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<td>ENV 305</td>
<td>Solid Waste Management</td>
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<td>ENV TE</td>
<td>Engineering Technical Elective</td>
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GUIDELINES AND STIPULATIONS
- Course offerings are subject to change
- ENV EGR majors note that at least one of their technical elective courses must be include one course in engineering
Attachment 3

Sustainability Management Minor Budget for APC
<table>
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<td>Handouts</td>
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<td>Promotional Items</td>
<td>Handouts for academic fairs</td>
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