**ANNUAL DEGREE PROGRAM ASSESSMENT** **REPORT**

# Overview

The emphasis of the report should be on PLO and CASLO assessment, action items emerging from those assessments, and a table listing the top three budget requests from each degree program.  Bullet points are certainly acceptable for the sections requiring written responses

**Please hold off uploading your report to the ARPD system website until we get further instructions from the system office (ignore the upload roman numerals listed)**

# 2017-18 Program Review preparation guidelines

Program Name:

**SELECT THE DESCRIPTION TAB AND THEN EDIT:**

1. Provide a description of your program

Program Description

The Sustainable Science Management (SSM) program, leading to a baccalaureate degree, provides a variety of options to students seeking employment in a rapidly expanding number of occupations committing to the field of sustainability. Coursework covers important contemporary topics including but not limited to energy, ecology, business and management, water and wastewater, agriculture, waste-management, economics, policy, the built environment, natural and social science; all in the context of case studies in the larger interdisciplinary field of sustainability. Students develop systems thinking and analytical skills, which will enable graduates to apply learned principles to the changing and complex issues of the future. The program is designed to equip students with the fundamental skills necessary to bridge disciplines and to facilitate sustainable solutions and operations for any

organization or community.

**SELECT THE ANALYSIS TAB AND THEN EDIT**

1. Briefly respond for each cautionary and/or unhealthy Quantitative Indicator (**Part II-Analysis of the Program**): **Please hold off discussing the health call elements until we get further instructions from the system office.**
   1. Demand Indicator: n/a

* 1. Effectiveness Indicator: Class fill rates have dipped over the past consistent with a loss of a faculty position which occurred two years ago and system-wide loss of SSH. Countering this, we are seeing more enrollments in lower division which can be expected to fill course through the program map in the next 2-3 years.
  2. Efficiency Indicator: Fall to fall persistence was lower than in the past as we saw several students leave the program for unusual reasons; major health issues, moving out of state, temporary maternity and others.

1. If relevant, share a brief analysis for any Perkins Core Indicator not met (**Part II-Analysis of the Program)**: **Please hold off discussing the Perkins indicators until we get further instructions from the system office.**
2. Analysis of the Program (**Part II-Analysis of the Program)**
3. Briefly discuss any new significant program actions (new certificates, stop out, gain or loss of positions) as results of last year’s action plan (**Part II-Analysis of the Program)**.

Over the past year the SSM Program Learning Outcomes were reduced in number and simplified following consultation with the SSM advisory Committee and the UHMC Assessment Coordinator. SSM PLOs are now stated as:

1.     Describe the functions, inter-relationships, and limitations of human-developed and naturally occurring systems.

2.     Utilize systems and sustainability science tools to solve complex problems and design durable responses.

3.     Understand contemporary legal, technological, economic, cultural, and ethical infrastructure as it impacts sustainability.

4.     Utilize conventional and emerging methods to measure sustainability aspects of behaviors.

5.     Integrate transdisciplinary knowledge; across cultural, social and educational realms; to identify and implement sustainable practices.

1. Describe results from previous assessment goal and/or action implementation (**Part II-Analysis of the Program)**
   1. PLO The new PLOs have been approved for incorporation into the SSM curriculum, along with associated changes in the program map and courses. Several new course, both required and electives, were added to the program map and eight of 14 courses had revisions to their prerequisites. A glitch in the new Kuali curriculum management system has prevented these from appearing in the UHMC catalog.

Per the below, one of the new PLOs was applied to a ‘pilot’ assessment for SSM 101 over the past semester.

|  |  |  |
| --- | --- | --- |
| List PLO(s) to be assessed | 2.     Utilize systems and sustainability science tools to solve complex problems and design durable responses. |  |
|  | Scope (what are you going to do) | Timeline (by when) |
| Gathering information: How will you assess the PLOs? | A mid term exam essay question was devised specifically to test students’ capacities for this PLO. The question was weighted with 20 of 100 points on the exam. Individual scores were gathered and data reviewed for this purpose. |  |
| Assessing the information: What did you learn or what’s working and/or needs to be changed? | A score of 12 points was considered minimum needed to pass this test question. Only 2 of 24 students failed to achieve that grade (and one of those did so on a make up opportunity.  Average score on this question was 16. Median was at 17. Overall students did better on this question than on the exam generally.  Systems thinking has been stressed from early in the semester and it is clear students gain an early understanding of the concept, which is critical to their success in the program overall. |  |
| Validating the information: Was this information shared with your advisory committee? If so, how? | The specific results of this test have not been shared with the Ac as it is so new. However the concepts of systems thinking has been discussed in many Ac meetings in the past and the committee has strongly endorsed it as an important concept for our students. |  |
| Closing the loop: what is your plan to implement changes to your program emerging from PLO assessment results? | In this particular case it does not appear that changes should be made at this time. However in a related vein, in discussions with other faculty and potential articulation partners for offering sustainability courses in other UH system venues, it provides a basis for working systems thinking into initial coursework on a routine basis. |  |
| Notes: |  |  |

Assessment strategy/Instrument/Evidence (check all that apply):

Work Sample

Other Please

Portfolio Project Exam XXWriting Sample

explain

Results of program assessment:

The following were present at the PLO assessment:

Results have been discussed with SSM faculty and with UH System Sustainability Office personnel who are working on the establishment of entry level sustainability courses.

* 1. CASLO There was no new CASLO assessment done for the Creative Literacy CASLO for this year.

1. Describe Goals and/or actions from previous assessment results (**Part III-Action Plan):**

The PLOs now in effect went through several iterations in order to reach a more manageable and comprehensive assessment set for the program. Under the pilot described above, the course measured showed that PLO #2 is effectively being addressed even in the initial SSM course, SSM 101.

Future years will bring additional assessments of other courses and PLOs, hopefully to result in both better coursework and better assessment methods. The following is the revised assessment schedule for SSM coursework:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SSM Course S-PLO Assessment Plan |  |  |  |  |  |  |  |  |  |  |
| PLO | Fa 2018 | SP 2019 | Fa 2019 | Sp 2020 | Fa 2020 | Sp 2021 | Fa 2021 | Sp 2022 | Fa 2022 | Sp 2023 |
| 1 |  |  |  | SSM 302 |  |  |  | SSM 202 | SSM 201 |  |
| 2 | SSM 101 |  |  |  | SSM 422 |  | SSM 403 |  |  |  |
| 3 |  | SSM 384 |  | SSM 302 |  | SSM 495 |  |  | SSM 201 | SSM 401 |
| 4 |  |  | SSM 301 |  | SSM 275 |  | SSM 403 |  |  |  |
| 5 |  | SSM 496 |  |  |  | SSM 495 |  | SSM 202 |  | SSM 401 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

1. Provide a table listing the top three budget requests from each degree program (**Part IV-Resource Implications)**.

1. Student Intern stipend. In past years a student has served as an intern for the UHMC Sustainability Committee and the SSM program. This is a low cost and high value opportunity for a student to provide significant resources for the fulfillment of sustainability goals on campus and to gain some important experience working in the field. (EST. $8000/YR)

2. Enhanced Testing Equipment. SSM students would benefit greatly from more field work, and this can best be achieved with field equipment. The request is for 10 GPS field units to allow location and data input to GIS systems, plus a mobile water testing lab for both fresh and saltwater resources. (EST. $11,000 one time expense)

3. Profe3ssional Development funding. SSM faculty has no peers per se in the UH system yet could benefit greatly from communication with others in the sustainability science field. (EST. $5000/yr)

**SELECT THE P-SLOs TAB and then EDIT**

1. PLO selected for this academic year (click on the PLO assessed – it will turn green).
2. **Evidence of Industry Validation** (check all that apply):

Advisory Committee Meeting(s) \_\_, How many? \_2\_

Did Advisory Committee discuss CASLO/PLO? Yes\_X\_ No\_\_

Coop Ed Placements \_5\_ Fund raising activities/events \_\_ Service Learning \_\_

Provide program services that support campus and/or community YES

Outreach to public schools \_YES\_

Partner with other colleges, states and/or countries \_YES\_

Partner with businesses and organizations \_YES\_

Other\_\_ Describe\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Next steps:**

For program learning outcomes (check all that apply):

Assess the next PLO\_X\_\_ Review PLOs\_\_\_ Adjust assignment used for PLO\_\_\_

Adjust course used for PLO\_X\_\_ Meet with Advisory Committee\_\_X\_\_

Other\_X\_\_ Please explain: Complete formal integration of curriculum changes into Kuali.

1. Please list any professional development needs you may have for your program. (see above)