**Sinclair Community College**

**Continuous Improvement Annual Update 2012-13**

**Please submit to your dean and the Provost’s Office no later than Oct. 1, 2012**

**Department:** 0573 – Engineering – University Parallel

Year of Last Program Review: FY 2008-09

Year of Next Program Review: FY 2015-2016

**Section I: Department Trend Data, Interpretation, and Analysis**

**Degree and Certificate Completion Trend Data – OVERALL SUMMARY**

Please provide an interpretation and analysis of the Degree and Certificate Completion Trend Data (Raw Data is located in Appendix A*): i.e. What trends do you see in the above data? Are there internal or external factors that account for these trends? What are the implications for the department? What actions have the department taken that have influenced these trends? What strategies will the department implement as a result of this data?*

**Per the DAWN Portal, the number of graduates in FY 10-11 was 30, not 21. For 11-12, it was 31. The above chart has been updated with this information.**

Graduation rates are slowly climbing. This can be attributed to changes in the program in the recent past to reduce excess credits that would not transfer to partner institutions. Additionally, better communication with these students helps keep them on-track to graduate.

A further look at the demographics of the program indicates that the percentage of women has climbed somewhat over the past 5 years, averaging 14% but 16% for this past year.
Minority participation has been averaging around 19% but dropped to 17% in 2011-12.

**Course Success Trend Data – OVERALL SUMMARY**

**NOT APPLICABLE**

**Section II: Progress Since the Most Recent Review**

Below are the goals from Section IV part E of your last Program Review Self-Study. Describe progress or changes made toward meeting each goal over the last year.

|  |  |  |
| --- | --- | --- |
| **GOALS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| Explore adding global awareness to the courses/program. | In progress [ ] Completed [ ] No longer applicable [x]  | Affects transfer. Students are allowed to take any OTM courses and then follow specific guidelines from their receiving institution.  |
| Online courses. | In progress [ ] Completed [x] No longer applicable [ ]  | Some general education courses are available on-line. No plans to make the core engineering courses on-line. |
| New calculus based Thermodynamics course as suggested by most universities. | In progress [x] Completed [ ] No longer applicable [ ]  | First offering of new course Fall 2012. |

Below are the Recommendations for Action made by the review team. Describe the progress or changes made toward meeting each recommendation over the last year.

|  |  |  |
| --- | --- | --- |
| **RECOMMENDATIONS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| The program coordinator has done much to revitalize this degree program, but his efforts need to be formalized so that when responsibility for this program transfers to someone else at some future time the momentum that has developed in this program is not lost. Due to the nature of the program, it is recommended that, like the current coordinator, any future coordinators have an engineering background. The current coordinator has done a stellar job of overseeing this program, and that should not be lost at some point in the future when he hands his responsibilities over to someone else. A formalized and well-documented transition process will need to be developed in anticipation of this. The advisory committee may have some insights on how to accomplish this. | In progress [ ] Completed [x] No longer applicable [ ]  | Program has transitioned to new coordinator. Several new initiatives are under way to better serve students in the program (see later). |
| The coordinator has developed a marketing plan, and it is recommended that the marketing plan be pursued as a way of attracting students to the program. | In progress [x] Completed [ ] No longer applicable [ ]  | Marketing materials available. Working with marketing for a fall HS event. |
| Strong relationships already exist with area universities, particularly with the University of Dayton. It is recommended that the coordinator continue to maintain these relationships. | In progress [x] Completed [ ] No longer applicable [ ]  | Existing relationships continuing, working on developing articulation agreements with other schools where our students often transfer. |
| Much of the knowledge regarding this program is held by the coordinator and by a Senior Academic Advisor. It is recommended that cross-training occur and documentation of policies and procedures be made, such that when other individuals transition into these positions there is continuity of policies and procedures. There is a pressing need for clear documentation that will allow a variety of academic advisors to assist interested students. | In progress [x] Completed [ ] No longer applicable [ ]  | Working to develop additional materials about the programs at schools where students transfer.All advisors have been provided with an information sheet on the differences between engineering and engineering technology. |
| The formation of the advisory committee was an important step for this program. It is recommended that the coordinator work closely with the committee, such that the committee feels engaged in program maintenance and improvement. The self-study mentions that a “definite plan will be developed in the advisory committee meeting in Spring 2010” to increase student retention, and it is recommended that this be pursued in that meeting. | In progress [ ] Completed [x] No longer applicable [ ]  | Spring 2012 marketing initiatives were implemented. Work with advisory is ongoing and additional actions will be taken in the future. |
| Work recently began on the web page for the program, and continued development of this is recommended. | In progress [x] Completed [ ] No longer applicable [ ]  | Will work on as web page developer has time.  |
| Continue efforts to better communicate with students in the program. | In progress [x] Completed [ ] No longer applicable [ ]  | New Angel communityAdditional outreach to current students with email and discussion board to existing students. |

**Section III: Assessment of General Education & Degree Program Outcomes**

The Program Outcomes for the degrees are listed below. **All program outcomes must be assessed at least once during the 5 year Program Review cycle, and assessment of program outcomes must occur each year**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **General Education Outcomes** | To which degree(s) is this program outcome related? | Year assessed or to be assessed. | Assessment MethodsUsed | What were the assessment results? (Please provide brief summary data) |
| Oral Communication | All programs | **2011-2012** | None | None |
| Written Communication | All programs | **2011-2012** | Pre- and Post- assessment in Calculus 1 | 67% wrote complete, coherent sentences.22% had grammatical errors. |
| Critical Thinking/Problem Solving | All programs | **2012-2013** |  |  |
| Values/Citizenship/Community | All programs | **2013-2014** |  |  |
| Computer Literacy | All programs | **2014-2015** |  |  |
| Information Literacy | All programs | **2015-2016** |  |  |
|  |  |  |  |  |
| **Program Outcomes** | To which course(s) is this program outcome related? | Year assessed or to be assessed. | Assessment MethodsUsed | What were the assessment results? (Please provide brief summary data) |
| Develop skills in calculus, analytical geometry and differential equations to analyze and solve engineering problems. | MAT 2270MAT 2280 | 2012-13 |  |  |
| Demonstrate written and oral communication skills for effective presentations. | ENG 1101ENG 1201COM 2211OTM Arts/Humanities ElectiveOTM Social/ Behavioral Elective | 2013-14 |  |  |
| Use mathematics and analytical tools for engineering and related problem solving. | EGR ElectivesSME 1101 | 2011-12 | Exams | Section averages consistently above 75%, consistently higher than WSU students on same exam in parallel course. |
| Identify and apply the basic laws of physics and chemistry including mechanical, electrical, heat, light, sound, and inorganic chemistry to enhance comprehension of engineering topics. | CHE 1211PHY 2201PHY 2202 | 2014-15 |  |  |

**General Education Outcomes**

1. Are changes planned as a result of the assessment of general education outcomes? If so, what are those changes?

Will be working to identify additional courses that are in the EUT program for assessment of general education outcomes.

1. How will you determine whether those changes had an impact?

Once in place, will assess results.

**Program Outcomes**

1. Are changes planned as a result of the assessment of program outcomes? If so, what are those changes?

Matlab is currently used in EGR 1101 but was not formally taught as a part of the class. As a result of student feedback, a formal block on Matlab has been added along with a test over the use of the program.

1. How will you determine whether those changes had an impact?

Feedback from students on their confidence with the program, along with test scores on the Matlab test.

**Improvement Efforts**

1. What were the results of changes that were planned in the last Annual Update? Are further changes needed based on these results?

No annual updates have been submitted since the program review. This is being corrected starting this year.

1. Are there any other improvement efforts that have not been discussed in this Annual Update submission?

Additional efforts are being made to bring the EUT students into a community of students with the EUT Community Angel shell.