**Continuous Improvement Plan**

**Outcomes might not change from year to year. For example, if you have not met previous targets, you may wish to retain the same outcomes. *If this is an academic, workforce, or continuing education program, you must have at least one student learning outcome.* You may also add short-term administrative, technological, assessment, resource or professional development goals, as needed.**

**Date:** 31Jan2022 **Name of Program/Unit:** Web & Mobile Development

**Contact name:** Justin Lewis **Contact email:** jlewis@collin.edu **Contact phone:**  x1958

**Table 1: CIP Outcomes, Measures & Targets Table (focus on at least one for the next two years)**

|  |  |  |
| --- | --- | --- |
| **A. Expected Outcome(s)**Results expected in this unit(e.g. Authorization requests will be completed more quickly; Increase client satisfaction with our services) |  **B. Measure(s)**Instrument(s)/process(es) used to measure results(e.g. survey results, exam questions, etc.) | **C. Target(s)**Level of success expected(e.g. 80% approval rating, 10 day faster request turn-around time, etc.) |
| Increase student retention between intermediate and advanced course | An increase in the number of students who enter and complete INEW 2334, ITSE 1333, and ITSE 2353. These are the intermediate courses that are within our control in our program that are not electives in the AAS degree. Measure will be the yearly Institutional Research program review data.  | Higher number of students enrolled in these three courses. |
| Increase overall enrollment in the program and number of graduates. | Higher number of overall students enrolled in the program and an increase in the number of graduates in the program. Instrument used: Institutional Research’s annual Program Review Data. | Higher number of students enrolled in the program for each semester when compared to the previous Fall or Spring enrollment as well as a higher number of overall graduates. |
| Overall Outcome: Increase our success rate in programming courses. Learning Outcome:Specific goal: Increase students programming skill by adding in each of our programming courses an activity or assignment that focuses on algorithms and/or pseudo-coding.  | Measured in ITSE 2302 with a standardized open-ended question/assignment that solves a stated problem by creating a step-by-step algorithm which may require coding or use of pseudo-code. | Success is 70% correct out of 100%. |

**Description of Fields in the Following CIP Tables:**

**A. Outcome(s)** -Results expected in this program (e.g. Students will learn how to compare/contrast conflict and structural functional theories; increase student retention in Nursing Program).

**B. Measure(s)** -Instrument(s)/process(es) used to measure results

(e.g. results of surveys, test item questions 6 & 7 from final exam, end of term retention rates, etc.)

**C. Target(s)** -Degree of success expected (e.g. 80% approval rating, 25 graduates per year, increase retention by 2% etc.).

**D. Action Plan** -Based on analysis, identify actions to be taken to accomplish outcome. What will you do?

**E. Results Summary** - Summarize the information and data collected in year 1.

**F. Findings** - Explain how the information and data has impacted the expected outcome and program success.

**G. Implementation of Findings** – Describe how you have used or will use your findings and analysis of the data to make improvements.

**Table 2. CIP Outcomes 1 & 2 (FOCUS ON AT LEAST 1)**

|  |
| --- |
| 1. **Outcome #1**

Increase student retention between intermediate and advanced course |
| 1. **Measure (Outcome #1)**

Increase in number of students enrolling in INEW 2334, ITSE 1333, and ITSE 2353 from the Institutional Research statistics | 1. **Target (Outcome #1)**

An increase in the number of students enrolled. |
| 1. **Action Plan (Outcome #1)**

Establish a reminder for faculty and students when registration for the next semester opens and again at the end of the semester about these courses and the importance of the content covered in these courses to the student’s marketability. Also include the time and delivery method of these courses. |
| 1. **Results Summary (Outcome #1)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|   |   |   |   |   | Enrollment Totals for year |   | Enrollment Totals for year |
|   |   | 2019FA | 2020SP | 2020SU | sum | 2020FA | 2021SP | 2021SU | sum | 2021FA | 2022SP |
| ITSE 2302 | leads to | 29 | 25 | 0 | 54 | 42 | 25 | 12 | 79 | 24 | 22 |
|   | ⬇⬇⬇ |   |  |  |  |  |  |  |  |  |   |
|   | INEW 2334 |   |   |   |   | 20 |   |   |   | 26 |   |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|   |   |   |   |   | Enrollment Totals for year |   | Enrollment Totals for year |
|   |   | 2019FA | 2020SP | 2020SU | 2020FA | sum | 2021SP | 2021SU | 2021FA | sum | 2022SP |
| ITSE 2302 | leads to | 29 | 25 | 0 | 42 | 67 | 25 | 12 | 24 | 61 | 22 |
|   | ⬇⬇⬇ |   |  |  |  |  |  |  |  |  |   |
|   | ITSE 1333 |   | 11 |   |   |   | 22 |   | 23 |   | 12 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|   |   |   |   |   | Enrollment Totals for year |   | Enrollment Totals for year |
|   |   | 2019FA | 2020SP | 2020SU | sum | 2020FA | 2021SP | 2021SU | sum | 2021FA | 2022SP |
| ITSE 1330 | leads to | 23 | 24 | 15 | 62 | 23 | 28 | 14 | 65 | 19 | 32 |
|   | ⬇⬇⬇ |   |  |  |  |  |  |  |  |  |   |
|   | ITSE 2353 |   |   |   |   | 14 |   |   |   | 26 |   |

 |
| 1. **Findings (Outcome #1)**

|  |
| --- |
| Percentage of advancement to INEW-2334 |
| year 1 | 37.04% |  | year 2 | 32.91% |

Total enrollment in INEW-2334 increased. However, this data indicates that advancement to INEW-2334 decreased. An abnormally large number of students enrolled in ITSE-2302 in the 2020FA semester. This could be affecting the percentage of retention. However, I can only guess why it would. One would expect at least the same percentage to advance to the next level.

|  |  |
| --- | --- |
| Percentage of advancement to ITSE-1333 |  |
| year 1 | 32.84% |  | year 2 | 57.38% |

Total enrollment in ITSE-1333 increased. Advancement from ITSE-2302 to ITSE-1333 increased year over year from 33% to 57%. In this calculation the semester of unusually large ITSE-2303 enrollment was used in the Year 1 calculations (because of the terms when ITSE-1333 is offered). Therefore, the same data anomaly that caused the INEW-2334 to appear low, could be making the ITSE-1333 advancement seem large.

|  |  |
| --- | --- |
| Percentage of advancement to ITSE-1330 |  |
| year 1 | 22.58% |  | year 2 | 40.00% |

The second year showed significant improvement in retention. |
| 1. **Implementation of Findings**

Overall, the program seems to show improved retention of student continuing into their second year of school.The program’s curriculum is about to go through a major change which will take effect beginning in the next catalog year. Therefore, there courses will no longer be a valid measure of improvement going forward. ITSE-1333 will soon be an elective, not required. ITSE-1330 is being removed from the curriculum.The instructors of ITSE-2302 will continue to remind students at registration time about the follow-on courses.A new CIP plan that focusses on a student outcome will be implemented for the next 2 years. |

|  |
| --- |
| 1. **Outcome #2**

Increase students programming skill by adding in each of our programming courses an activity or assignment that focuses on algorithms and/or pseudo-coding. |
| 1. **Measure (Outcome #2)**

Measured in ITSE 2302 with a standardized open-ended question/assignment that solves a stated problem by creating a step-by-step algorithm which may require coding or use of pseudo-code | 1. **Target (Outcome #2)**

Success is 70% correct out of 100% in solving a specific problem by creating an algorithm.  |
| 1. **Action Plan (Outcome #2)**

Adding content on algorithm logic along with either an activity or assignment using algorithms and pseudo-code in ITSE 2302. |
| 1. **Results Summary (Outcome #2)**

After this plan was created in January 2020, the Discipline Lead was directed to change it. However, when the COVID pandemic began during the same semester the prior Discipline Lead (also the prior instructor of ITSE-2302) had health problems and neglected to make the changes to the plan or collect any data for the course. |
| 1. **Findings (Outcome #2)**

No findings were produced. |
| 1. **Implementation of Findings**

Recently under a new Discipline Lead and Instructor a new plan has been begun to be implemented. The CIP will be revised for the next two year period. |