
















**Report:** Summary of the Assessment Cycle Results in : 2019-2020 Assessment Cycle: Assessment Plan and Assessment Findings

**Report Generated by Taskstream**

**Workspace:** Academic Program Assessment and Planning Workspace

**Assessment Plan Template :** IU Kokomo Academic Assessment Template [

**Report Generated :** Tuesday, September 01, 2020

Organizational Area	Summary Results																																																																														
<p>Indiana University System AMS » Indiana University: Kokomo » Academic Affairs » School of Sciences</p> <p><b>Informatics</b></p>	<p><b>Overall Statistics</b></p> <ul style="list-style-type: none"> <li>• <b>42%</b> (5/12) outcomes were included</li> <li>• <b>100%</b> (5/5) of outcomes included have at least one measure specified</li> <li>• <b>100%</b> (5/5) of outcomes included have measures with findings specified</li> </ul> <table border="1" data-bbox="695 565 2022 1076"> <thead> <tr> <th colspan="2" data-bbox="695 565 1358 634">5 Total Measures</th> <th colspan="2" data-bbox="1358 565 2022 634">5 Total Measures with Findings</th> </tr> <tr> <th colspan="2" data-bbox="695 634 1026 683">Measure Type/Method</th> <th colspan="2" data-bbox="1026 634 1358 683">Measure Level</th> <th colspan="2" data-bbox="1358 634 2022 683">Acceptable Target Achievement</th> </tr> </thead> <tbody> <tr> <td data-bbox="695 683 827 721">Student Artifact</td> <td data-bbox="827 683 1026 721">0 (0%)</td> <td data-bbox="1026 683 1138 721">Course</td> <td data-bbox="1138 683 1358 721"> 5 (100%)</td> <td data-bbox="1358 683 1470 721">Not Met</td> <td data-bbox="1470 683 2022 721">0 (0%)</td> </tr> <tr> <td data-bbox="695 721 827 758">Exam</td> <td data-bbox="827 721 1026 758">0 (0%)</td> <td data-bbox="1026 721 1138 758">Program</td> <td data-bbox="1138 721 1358 758">0 (0%)</td> <td data-bbox="1358 721 1470 758">Met</td> <td data-bbox="1470 721 2022 758"> 4 (80%)</td> </tr> <tr> <td data-bbox="695 758 827 795">Portfolio</td> <td data-bbox="827 758 1026 795">0 (0%)</td> <td data-bbox="1026 758 1138 795">Institution</td> <td data-bbox="1138 758 1358 795">0 (0%)</td> <td data-bbox="1358 758 1470 795">Exceeded</td> <td data-bbox="1470 758 2022 795"> 1 (20%)</td> </tr> <tr> <td data-bbox="695 795 827 833">Other</td> <td data-bbox="827 795 1026 833"> 5 (100%)</td> <td data-bbox="1026 795 1138 833">Other</td> <td data-bbox="1138 795 1358 833">0 (0%)</td> <td data-bbox="1358 795 1470 833">Unspecified</td> <td data-bbox="1470 795 2022 833">0 (0%)</td> </tr> <tr> <td data-bbox="695 833 1026 870"><b>Total Direct</b></td> <td data-bbox="1026 833 1358 870"> <b>5 (100%)</b></td> <td data-bbox="1026 870 1138 907">Unspecified</td> <td data-bbox="1138 870 1358 907">0 (0%)</td> <td colspan="2"></td> </tr> <tr> <td data-bbox="695 907 827 945">Survey</td> <td data-bbox="827 907 1026 945">0 (0%)</td> <td colspan="4"></td> </tr> <tr> <td data-bbox="695 945 827 982">Focus Group</td> <td data-bbox="827 945 1026 982">0 (0%)</td> <td colspan="4"></td> </tr> <tr> <td data-bbox="695 982 827 1019">Interview</td> <td data-bbox="827 982 1026 1019">0 (0%)</td> <td colspan="4"></td> </tr> <tr> <td data-bbox="695 1019 827 1057">Other</td> <td data-bbox="827 1019 1026 1057">0 (0%)</td> <td colspan="4"></td> </tr> <tr> <td data-bbox="695 1057 1026 1094"><b>Total Indirect</b></td> <td data-bbox="1026 1057 1358 1094"><b>0 (0%)</b></td> <td colspan="4"></td> </tr> <tr> <td data-bbox="695 1094 1026 1131"><b>Unspecified</b></td> <td data-bbox="1026 1094 1358 1131"><b>0 (0%)</b></td> <td colspan="4"></td> </tr> </tbody> </table>			5 Total Measures		5 Total Measures with Findings		Measure Type/Method		Measure Level		Acceptable Target Achievement		Student Artifact	0 (0%)	Course	 5 (100%)	Not Met	0 (0%)	Exam	0 (0%)	Program	0 (0%)	Met	 4 (80%)	Portfolio	0 (0%)	Institution	0 (0%)	Exceeded	 1 (20%)	Other	 5 (100%)	Other	0 (0%)	Unspecified	0 (0%)	<b>Total Direct</b>	 <b>5 (100%)</b>	Unspecified	0 (0%)			Survey	0 (0%)					Focus Group	0 (0%)					Interview	0 (0%)					Other	0 (0%)					<b>Total Indirect</b>	<b>0 (0%)</b>					<b>Unspecified</b>	<b>0 (0%)</b>				
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Report : Assessment Cycle Details for : Informatics

Report Generated by Taskstream

Workspace : Academic Program Assessment and Planning Workspace

Assessment Plan: 2019-2020 Assessment Cycle: Assessment Plan and Assessment Findings

Assessment Plan Template: IU Kokomo Academic Assessment Template

Report Generated : Tuesday, September 01, 2020

## Measures and Findings

### Informatics Learning Outcomes

#### Outcome

#### SLO 1 for Communication

*Students will introduce, analyze, support, and defend positions in a written document.*

#### Mapped to:

*No Mapping*

#### Measure

*Capstone project in INFO I450 (Design and Development of an Information System)*

#### COURSE LEVEL; DIRECT - OTHER

#### Details/Description:

In the Informatics program, the capstone project is conducted in two separate courses. I450 and I451. In I450, students analyze and design a solution for a real-world problem. In I451, students design the database and implements the solution.

In evaluating this measure, the final report submitted by each team of students in I450 will be used for this evaluation.

#### Acceptable Target:

We expect that 75% of students will provide complete or detailed content in their reports that is moderately or well-organized and supported with evidence regarding the project they chose.

#### Implementation Plan (timeline):

Informatics students enrolled in the fall 2018 offering of INFO-I 450 (Design and Development of an Information System) will be evaluated. In INFO I450, there were 18 students enrolled in the course. These students are seniors enrolled in their first course of a 2-course sequence capstone project.

4 teams with 4 to 5 students in each team were established in INFO I450. These teams were assigned to four different projects. These projects are real-life projects, where the students have real clients. These projects require students to meet with their clients in order to gather the requirements about client's needs.

Most of the requirements gathering process was established in INFO I450, but in reality, this process may last for the entire life cycle of the project, as the requirements' continue to change/evolve.

These projects are chosen for assessing this learning outcome because they were graded based on what extent the final report that is submitted by team is complete / detailed, how organized is this final report, and whether there is sufficient or substantial evidence in the report about the process of requirement gathering, system analysis and design, and client

acceptance.

**Key/Responsible Personnel:**

Course instructors (Dr. Chen Zhong and Dr. Awny Alnusair) evaluate the performance of the students on their capstone project

**Supporting Attachments:**

***Findings***

*for Capstone project in INFO I450 (Design and Development of an Information System)*

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**Summary of Findings:**

In INFO I450, students produced very good reports for their capstone projects. In this course, there were 4 different group projects created and submitted at the end of the semester. The course project was divided into four phases (problem definition, prototyping, data flow diagrams, and data dictionary) in each one of these phases there is substantial written document that needs to be submitted for grading. At the end of the semester, students are expected to combine all phases in one large report and submit that for grading. All four teams have completed and submitted their final reports.

For this SLO, there were three components as detailed below:

Component#1 for the Learning Outcome: Content

Performance Criteria:

- Superficial
- Complete
- Detailed

Component#2 for the Learning Outcome: Organization

Performance Criteria:

- Unorganized
- Moderately well organized
- Well organized

Component#2 for the Learning Outcome: Evidence

Performance Criteria:

- None
- Limited
- Sufficient
- Substantial

Based on the provided components, students' performance was very good and met the 75% benchmark in terms content, organization, and evidence. In particular, there were two groups who were graded as Complete and other two groups graded as Detailed in terms of content. In terms of Organization, three groups were graded as moderately organized and one team as well organized. In terms of providing enough evidence to support claims of completeness of project activities, all four teams were able to provide sufficient evidence.

**Acceptable Target Achievement:**

Met

**Reflections/Notes:**

Based on the data we collected in this assessment cycle, Informatics students who are enrolled in the capstone project course demonstrate good overall knowledge regarding introducing, analyzing, supporting, and defending positions in written documents.

**Substantiating Evidence:**

**SLO 2 for Communication**

*Students will deliver an oral presentation on a technical topic.*

**Mapped to:**

*No Mapping*

**Measure**

*Capstone Project Presentation*

**COURSE LEVEL; DIRECT - OTHER**

**Details/Description:**

In the first Capstone class, INFO I450, students are expected to prepare Powerpoint slides and present their findings to the class and to invited people. based on guidelines provided by the instructors, the presentation is a summary of the project that they have analyzed and designed throughout the semester.

**Acceptable Target:**

The level of performance where students develop satisfactory presentation in terms of content, organization, and supportive visuals will be considered acceptable.

We expect that Eighty Percent (80%) or higher of students will provide satisfactory or exceptional work in their project presentations

**Implementation Plan (timeline):**

Informatics students enrolled in the fall 2018 offering of INFO-I 450 (Design and Development of an Information System) will be evaluated. In INFO I450, there were 18 students enrolled in the course. These students are seniors enrolled in their first course of a 2-course sequence capstone project.

4 teams with 4 to 5 students in each team were established in INFO I450. These teams were assigned to four different projects. These projects are real-life projects, where the students have real clients. These projects require students to meet with their clients in order to gather the requirements about client's needs. Most of the requirements gathering process was established in INFO I450, but in reality, this process may last for the entire life cycle of the project, as the requirements' continue to change/evolve.

These projects are chosen for assessing this learning outcome because they were graded based on what extent the project presentation was complete/detailed, organized, and supported by visuals

**Key/Responsible Personnel:**

Course instructors (Dr. Chen Zhong and Dr. Awny Alnusair) evaluate the performance of the students on their capstone project

**Supporting Attachments:**

**Findings**

*for Capstone Project Presentation*

**Summary of Findings:**

In INFO I450, students were required to prepare a 15-minutes presentation related to the analysis and design project that they completed throughout the semester. In this course, there were 4 different group projects. Prior to the presentation, the instructors provided a written document outlining the expectations for this presentation in terms of things such as what are the students expected to address (content), how to organize the presentation in terms of dividing the load among the team members, and what to include in terms of the models, prototypes, and other visuals. Each teams gets a 15-minute presentation and all team members must participate. In this semester, all team members in each one of the four teams was present and participated in this presentation.

For this SLO, there were three components as detailed below:

Component#1 for the Learning Outcome: Content

Performance Criteria:

- Superficial
- Complete
- Detailed

Component#2 for the Learning Outcome: Organization

Performance Criteria:

- Unorganized
- Moderately well organized
- Well organized

Component#2 for the Learning Outcome: Supporting Visuals

Performance Criteria:

- None
- Not supportive of the presentation
- Supportive of the presentation

Based on the provided components for this SLO, students' performance was excellent and exceeded the 80% benchmark in terms content, organization, and supporting visuals. In particular, all four groups were graded as excellent with the highest possible score. Students were able to present their projects in a professional manner, interact with the audience and answer questions about their projects.

**Acceptable Target Achievement:**

Exceeded

**Reflections/Notes:**

Based on the data we collected in this assessment cycle in INFO I450 presentations, the students, withing their respective teams, delivered excellent presentations in terms detailed content, organization, and supportive visuals.

**Substantiating Evidence:**

**SLO 2 for Information Organization and Processing**

*Students will organize information in a database.*

**Measure**

*Database design and Implementation in INFO 451*

COURSE LEVEL; DIRECT - OTHER

**Details/Description:**

**Mapped to:**

*No Mapping*

In the Informatics program, the capstone project is conducted in two separate courses. I450 and I451, In I450, students analyze and design a solution for a real-world problem. In I451, students design the database and implements the solution. In evaluating this measure, the design and implementation of the database that the students have completed for their capstone projects in I451 will be used for this evaluation.

**Acceptable Target:**

We expect that 80% of students will provide a satisfactory or exceptional design and implementation of the databases for their projects.

**Implementation Plan (timeline):**

Informatics students enrolled in the spring 2019 offering of INFO-I 451 (Design and Development of an Information System) will be evaluated. In INFO I451, there were 18 students enrolled in the course. These students are seniors enrolled in their first course of a 2-course sequence capstone project.

4 teams with 4 to 5 students in each team were established in INFO I451 (Same teams in I450). These teams continues to work on their projects fromt he previous semester. These projects are real-life projects, where the students have real clients..

These projects are chosen for assessing this learning outcome because they were graded based on what extent the design and implementation of the databases needed for a functional Information System was satisfactory or accurate.

**Key/Responsible Personnel:**

The instructor who teaches INFO I451 will evaluate the performance of the students on the design and development of the databases

**Supporting Attachments:**

## ***Findings***

### *for Database design and Implementation in INFO 451*

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**Summary of Findings:**

In INFO I451 (the second course of the capstone), 4 teams were created. Two teams with 4 students and two teams with 5 students each. This course is focuses on designing and developing an enterprise database for the capstone project. Students in this course learn the process of designing, normalizing, and then implementing databases and then apply that knowledge for their projects. The course project involves four different phases. In the first phase, students are expected to develop a conceptual model planning and analysis; in the second and third phases students were expected to provide a logical and physical database design, respectively, In the final phase of the project, students were expected to implement and test the database they created and then integrate the database in the final product.

For this SLO, there were two components:

Component#1: Database Design

Performance Criteria:

- Unsatisfactory
- Satisfactory
- Exceptional

Component#2: Database Implementation

Performance Criteria:

- No implementation
- Doesn't accurately implement the design
- Accurately implement the design

In terms of database design, one team provided exceptional design, two teams provided satisfactory designs and one team's design was unsatisfactory. In terms of the implementation aspect, three teams provided an excellent implementation that accurately implements the design and one team provided a design that needs improvements. It should be noted that before implementing the design, students must go back and fix any issues with their design. These projects are for real clients and the margin of error in terms of design and implementation should be nil. Based on the provided components for this SLO, students' performance was good overall and meets the 80% benchmark in terms of both database design and implementation.

**Acceptable Target Achievement:**

Met

**Reflections/Notes:**

Based on the data we collected in this assessment cycle, the students in INFO-I451 demonstrated a good overall knowledge of database design and implementation.

**Substantiating Evidence:**

**SLO 1 for User/Context-Centered Design**

*Students will analyze the user/contextual issues with the application of technology.*

**Mapped to:**

*No Mapping*

**Measure**

*Interactive Design Project in INFO I300 (HCI/Interaction Design)*

**COURSE LEVEL; DIRECT - OTHER**

**Details/Description:**

In INFO I300, the third phase of the Interactive Design project will be used for this assessment evaluation. The assigned interactive design project in I300 was a comprehensive project that requires students to analysis a computer-based system, gather requirements, design, prototype, and evaluate the design for this system based on user-generated requirements

**Acceptable Target:**

The level of performance where students develop complete description, analysis, and conclusions on the design of the interactive system based on user's inputs will be considered acceptable. We expect that Eighty Percent (80%) or higher of students will provide satisfactory or exceptional work in the testing phase phase of the course project that involves user interaction with a prototype

**Implementation Plan (timeline):**

Informatics students enrolled in the fall 2018 offering of INFO I300 (HCI/Interaction Design) are evaluated. In INFO I300, there were 24 students enrolled in the course. These students are mostly seniors. I300 is offered in the 100% online format.

Students in I300 were organized in 6 teams with 4 students in each team. These teams participated in a course project that asks for designing and evaluating an interactive web-based system for booking tickets online for events like concerts, the theater, and the cinema.

This project is chosen for assessing this learning outcome mainly because it was graded based on the correctness of the analysis for this system, which is done with experiments

with real users of the system. These grading criteria are aligned properly with the components of the learning outcomes in question.

**Key/Responsible Personnel:**

The instructor who teaches the course will evaluate the performance of the students in their interaction design project

**Supporting Attachments:**

***Findings***

*for Interactive Design Project in INFO I300 (HCI/Interaction Design)*

**Summary of Findings:**

In INFO I300, the third phase of the project, the evaluation phase, is focused on preparing a task that exercises the system that students are developing. Students were asked to provide enough details regarding this task so that potential users can experiment with the task and provide feedback to the students. Once the task is prepared, the students will select potential real users of the system and conduct a usability test based on a prototype of the system. Analysis of the users' performance and feedback is expected to be provided by the students.

Four out of the six teams provided a detailed description of the usability study with complete analysis and conclusions. These teams also conducted an analysis of an optional field study and described the semantics of it. The performance of the other teams was good overall but it was lacking some details related to the usability studies they have conducted. In particular the testing of the usability study was done in a hurry where they left the setup of the experiment out from the report that they have submitted.

Based on the provided components for this SLO, students' performance was good overall and meets the 80% benchmark for this SLO.

**Acceptable Target Achievement:**

Met

**Reflections/Notes:**

Based on the data that was collected in INFO I300, the students demonstrated a good overall knowledge and skills in conducting a usability study that analyzes the user/contextual issues with the application of technology.

**Substantiating Evidence:**

**SLO 2 for User/Context-Centered Design**

*Students will apply user/contextual issues while designing/developing an information system.*

**Mapped to:**

***Measure***

*Capstone Project prototyping Activity*

**COURSE LEVEL; DIRECT - OTHER**

**Details/Description:**

In the first Capstone class, INFO I450, as part of their capstone project, students are expected to develop and evaluate a non-operational prototype for an Information System.



This prototype needs to be tested with potential users of the system. As such, the user's feedback will be gathered and analyzed via user interviews and questionnaires .

**Acceptable Target:**

The level of performance where students design a prototype that is partially or fully reflect issues with user's interactions with the prototype will be considered acceptable.

We expect that Eighty Percent (80%) or higher of students will provide a prototype that is partially reflect user/contextual issues

**Implementation Plan (timeline):**

Informatics students enrolled in the fall 2018 offering of INFO-I 450 (Design and Development of an Information System) will be evaluated. In INFO I450, there were 18 students enrolled in the course. These students are seniors enrolled in their first course of a 2-course sequence capstone project.

4 teams with 4 to 5 students in each team were established in INFO I450. These teams were assigned to four different projects. These projects are real-life projects, where the students have real clients. These projects require students to meet with their clients in order to gather the requirements about client's needs.

Phase 2 (Prototyping) of the project was chosen for assessing this learning outcome because in this phase, the students are expected to apply user/contextual issues while designing a prototype for a real-life information system.

**Key/Responsible Personnel:**

Course instructors (Dr. Chen Zhong and Dr. Awny Alnusair) evaluate the performance of the students on their capstone project

**Supporting Attachments:**

***Findings***

*for Capstone Project prototyping Activity*

**Summary of Findings:**

In the second phase of the capstone project for INFO I450, students were asked to produce a non-operational prototype that shows a detailed design of the main screens of their capstone project. This prototype must be shown to the client (future users of the systems being designed and developed). Furthermore, the prototyped must also be experimented with by potential customers. Based on the feedback provided, the design and implementation of the prototype may change. The main point is to gather information from clients and potential users through interviews and questionnaires and then re-design the system to address the issues that users have identified.

Three out of the four teams provided a re-design of the prototype that fully reflect the issues that their customers identified. The work of the other two teams varies due to the lack of full participation of all team members in the work that was submitted. In team 4, only one students out of the four has fully worked in the project while the other three members participated partially. The work provided by this team is considered to be very good overall.

Considering the fact that 15 students out of 18 provided an excellent work in this phase of the project, we can conclude that the 80% benchmark was met for this SLO.

**Acceptable Target Achievement:**

Met

**Reflections/Notes:**

Based on the data we collected in this assessment cycle, the students in INFO-I300 demonstrated a good overall knowledge applying user/contextual issues while designing and developing an information system.

**Substantiating Evidence:**