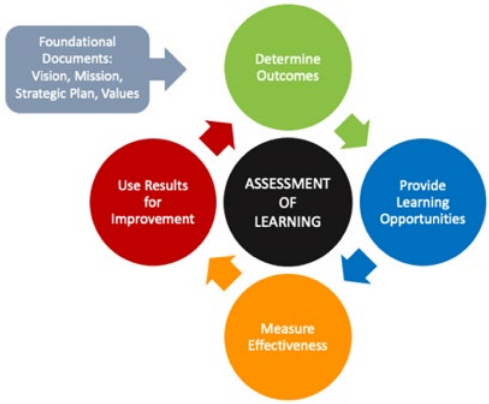
KENNESAW STATE UNIVERSITY

ASSESSMENT OF LEARNING
Example Report - Undergraduate Program

Guided by our vision, mission, and strategic plan, Kennesaw State University strives to continuously improve the quality of all aspects of the institution. Assessment of Learning is the process by which faculty demonstrate a commitment to continuous improvement in student learning and student success. Ongoing and thoughtful assessment and reflection supports a culture of evidence and data-informed improvement.

For the AY 2022 report, programs will use this revised template, which includes:

- Curriculum Map (recommended)
- Student Learning Outcome 1
- Student Learning Outcome 2
- Student Success Outcome
- Please note: Programs with *specialized accreditation* will continue to submit their most recent self-study in lieu of using the template.



The template incorporates questions to guide purposeful reflection and discussion at faculty meetings. The template may be modified to meet your program's needs as long as the pertinent information is included and easily identified. For instance, the report may be written in the form of a study for future publication or conference presentation, if desired.

The Assessment of Learning website provides additional resources to support your assessment efforts. Please contact the Assessment Office at assessment@kennesaw.edu if you have any questions or you would like to schedule a consultation. Thank you for your commitment to continuous improvement at KSU.

Cover Sheet

College:	College XYZ
Department:	Department of Health Science
Program:	Undergraduate Program
Program Coordinator:	Mary Smith
Assessment Coordinator (if applicable):	N/A

Have the outcomes and/or measures changed from the previous year? ☑ Yes ☐ No
If the outcomes or measures will be modified for the following academic year, please contact the Assessment Office at assessment@kennesaw.edu.

What challenges did your program encounter in collecting data and/or implementing strategies for improvement?
If applicable, please describe any challenges with data collection or the implementation of improvement strategies due to COVID-19, department changes, or other factors.

N/A

Is the Full Report Due? *Every 3 years (per the Cohort Schedule), two additional report items are required for the full report: 1) a summary and interpretation of the last 3 years of assessment results, and 2) the strategies for improvement that will be implemented over the next 3-year period.*

Based on the Cohort Schedule, is the full report due for your program? ☑ Yes ☐ No
If so, please complete the Full Report Addendum for each outcome. If not, the Full Report Addendum is not required. Please contact the Assessment Office at assessment@kennesaw.edu if you have any questions about your program's cohort or the Cohort Schedule.

Curriculum Map (recommended)

A curriculum map is used to demonstrate how the courses in the program of study align with the program-level student learning outcomes (it shows the courses that introduce and/or reinforce each student learning outcome). If improvements are needed for a student learning outcome, the curriculum map can help identify where those improvements can be made. A curriculum map also helps programs prepare for curriculum change proposals and successful Academic Program Reviews. Therefore, it is recommended that programs include their curriculum map with their assessment reports. If we have a list of your approved program-level student learning outcomes on file, we will send that file to you with the instructions for the assessment report. If we do not have those on file, you may be able to find them stored with your program records. If you need assistance, please contact the Assessment Office at assessment@kennesaw.edu.

PROGRAM-LEVEL STUDENT LEARNING OUTCOMES (SLOs): What are the program-level Student Learning Outcomes (SLOs) for your program?
Please list all SLOs for the program (At the end of the program, students will be able to…). All program-level SLOs are included in new program proposals and should be updated (as needed) with curriculum changes. Please highlight in yellow the two SLOs for which you are planning to measure and assess in your assessment report this year.

At the end of the program, students will be able to:

1. Recall general knowledge in human anatomy and physiology for both healthy and disease states.
2. Apply principles of biology, chemistry, physics, and statistics to the study of human health and disease.
3. Critically analyze the current literature on contemporary health issues.
4. Use appropriate scientific methods to develop a research study that examines a biomedical health problem.
5. Demonstrate effective written communication skills.
6. Demonstrate cultural competence in professional interactions.
7. Apply ethical principles to decision-making and problem-solving.
8. Demonstrate effective oral communication skills in a healthcare setting.

CURRICULUM MAP: Which courses in your program align with each of your Student Learning Outcomes (SLOs)?
Using a table format (see example below), map each of the SLOs to the courses in the program of study that include the SLO as part of the curriculum (these are usually required courses). Include the number of SLOs and courses appropriate for your program. Use an I (introduced) to indicate courses that introduce each SLO, a P (practiced) for courses where the SLO is practiced, and an A (assessed) for courses that include measures used to assess your 2-3 SLOs selected for continuous improvement (the measures included in this assessment report).

Learning Outcomes	**Courses**									
	HS 1013	**HS 2010**	**HS 3000**	**HS 3010**	**HS 3020**	**HS 3390**	**HS 4000**	**HS 4010**	**HS 4300**	**HS 4400**
SLO 1	I		P,A	P,A		P		P		P
SLO 2	I		P	P	P					
SLO 3		I							P	
SLO 4		I			P,A				P	
SLO 5		I			P				P	
SLO 6		I						P		P
SLO 7		I					P			P
SLO 8		I				P				P

Student Learning Outcome 1

STUDENT LEARNING OUTCOME: What will students know or be able to do upon completion of the program?
For continuous improvement, select a knowledge or skill area where students are struggling (there is a need for improvement). • Focus on one knowledge/skill area per outcome. • Use clear, concise language and action verbs (see Bloom's Taxonomy). • Learning outcomes should align with the expected level of rigor for the course and degree.

Students will recall general knowledge in human anatomy and physiology for both healthy and disease states.

MEASURES: How is evidence of the outcome collected?
Two measures are required. Include at least one direct measure for each SLO. Direct measures include exam items, rubric items, internship/clinical supervisor ratings. Indirect measures include survey/focus group questions and self-assessments. • Measures may be quantitative or qualitative. • Include assignment descriptions and assessment instruments in the Appendix and label them clearly. • Course grades and passing rates are too holistic and not effective measures of student learning outcomes.

Measure 1 - *What is the course name/number and time frame for data collection (i.e., Fall, Spring, Summer semesters)?*

Spring 2022 Course HS 3000

How is the data obtained? • Identify the specific exam, rubric, or survey items that pertain to the learning outcome (i.e., Capstone Project Rubric - Items 3 and 7). • Describe the process for artifact sampling (i.e., all students sampled vs. a subset of students sampled using a sampling procedure).

Course HS 3000: Final Exam (percentage of students answering each question below correctly)

1. What is the usual order of events in the chain of an infection?
   a) portal of entry → infectious organism → susceptible host → reservoir of infection → portal of exit → mode of transmission
   b) infectious organism → mode of transmission → susceptible host → portal of exit → reservoir of infection → portal of entry
   c) reservoir of infection → portal of exit → mode of transmission → susceptible host→ portal of entry → infectious organism
   d) infectious organism → reservoir of infection → portal of exit → mode of transmission → portal of entry → susceptible host

2. Which of the lists of structures include all of the central nervous system?
   a) cerebellum, cerebrum, spinal cord, diencephalon, brainstem
   b) midbrain, spinal cord, autonomic nerves, pons, diencephalon
   c) midbrain, cerebellum, special sense organs, medulla oblongata
   d) cerebrum, sensory neurons, motor neurons, cerebellum

3. Which of the following readings (in mm Hg) would be considered within a healthy resting blood pressure range?
   a) 145/90
   b) 120/30
   c) 100/90
   d) 115/70

All students were sampled in the course across for all sections.

Is this measure direct or indirect? ☑ Direct ☐ Indirect
Are all assignment descriptions, exam items, and rubrics included in the Appendix and clearly labeled? ☑ Yes ☐ No
If no, please explain.

Measure 2 - *What is the course name/number and time frame for data collection (i.e., Fall, Spring, Summer semesters)?*

Spring 2022 Course HS 3010

How is the data obtained? • Identify the specific exam, rubric, or survey items that pertain to the learning outcome (i.e., Capstone Project Rubric - Items 3 and 7). • Describe the process for artifact sampling (i.e., all students sampled vs. a subset of students sampled using a sampling procedure).

Course HS 3010: Final Exam – Short Answer Question

Question Prompt:
Create a diagram that shows the location of all "portals of entry" to the human body. Then, provide a detailed explanation of how the innate immune system provides physical and chemical barriers that defend against entry of pathogens at each of these portals.

All students are sampled in the course across all sections. Please refer to the *Short Answer Essay Question Rubric* in the Appendix.

Is this measure direct or indirect? ☑ Direct ☐ Indirect
Are all assignment descriptions, exam items, and rubrics included in the Appendix and clearly labeled? ☑ Yes ☐ No
If no, please explain.

RESULTS: What are the results for each measure? What are the big "take-aways" from these results?
Summarize results for each measure using clear and succinct language. • For quantitative measures, use summary statistics (i.e., counts, means, and/or frequency distributions) and include graphs/tables, if applicable. • For qualitative measures, use lists, themes, and/or descriptive narratives, if applicable. • If applicable, list factors that may explain or contribute to these results. • Describe the process used to share and discuss assessment results among faculty.

Measure 1: Course HS 3000: Spring 2022 Final Exam (percentage of students answering each question correctly)

	Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022
Question 1	70%	33%	62%	55%	88%	90%
Question 2	82%	44%	95%	89%	92%	93%
Question 3	91%	55%	92%	66%	94%	87%

During faculty meetings, we discussed the steady increase in scores for all three questions. We will continue the same strategies that we have in place to continue this trend.

Measure 2: Course HS 3010: Spring 2022 Final Exam – Short Answer Question

		Frequency Count	Count divided by # of students	Frequency Count	Count divided by # of students	Frequency Count	Count divided by # of students	Frequency Count	Count divided by # of students
	Mean	# of 4s	% of 4s	# of 3s	% of 3s	# of 2s	% of 2s	# of 1s	% of 1s
Diagram	3.2	18	60%	4	13%	5	17%	3	10%
Main Idea	2.4	6	20%	6	20%	11	37%	7	23%
Content	2.2	3	10%	5	17%	16	53%	6	20%
Style	3.1	5	50%	7	23%	5	17%	3	10%

At our spring faculty meeting, we discussed what can be done to increase rubric scores. Students performed the best on the *Diagram* and *Style* criteria. However, students are still struggling on the *Main Idea* and *Content* criteria, which are most related to the actual outcome.

FORMATIVE ASSESSMENT: Are formative assessments used in the courses that introduce or reinforce the student learning outcome? If so, to what extent? What are some examples of formative assessments that have taken place? What was the impact on student learning?

Formative assessment involves monitoring student learning in real-time so that instructors may modify their teaching and students may improve their learning throughout the course and/or program. • For example, instructors may use test item analysis to see where students struggled the most and add a lecture/activity to address the area of concern. Other examples of classroom assessment techniques include the minute paper, muddiest point, concept map, and classroom opinion polls. • Please discuss the extent to which formative assessment is used in the courses that introduce or reinforce the student learning outcome (ex. percentage of instructors using formative assessment), provide some examples of these formative assessments, and discuss faculty perceptions of the effectiveness of these formative assessments.

- In HS 3000, 80% of instructors reported using formative assessments. For example, in a Spring 2022 HS 3000 course, during a live class, students created a concept map that provided them with a visual representation, as well as showed them the usual order of events in the chain of an infection. Students were able to recall information together, which in return reinforced the learning material. Corrections in their thinking process were made on the spot. The concept map was also used as a study guide for their upcoming exam. Students provided feedback indicating that this exercise helped them to do well on the exam (average grade: 84%).
- In HS 3010, 55% of instructors reported using formative assessments. For example, in a Spring 2022 HS 3010 course, during a live class, a MS Teams "Polly" poll was taken using similar questions from the upcoming exam. Students were able to anonymously answer each question. This quickly showed where students were still struggling, and the instructor reviewed those specific concepts. Exam scores were much higher compared with the previous year.

STATUS OF IMPROVEMENT STRATEGIES: What progress has been made on improvement strategies previously identified?

Please provide an update on the strategies for improvement identified in the last full report. • Identify any adjustments to the strategies or timelines if applicable. • If it is determined that there is no more room for improvement, please indicate changes that will be made to the next academic year's Assessment Plan.

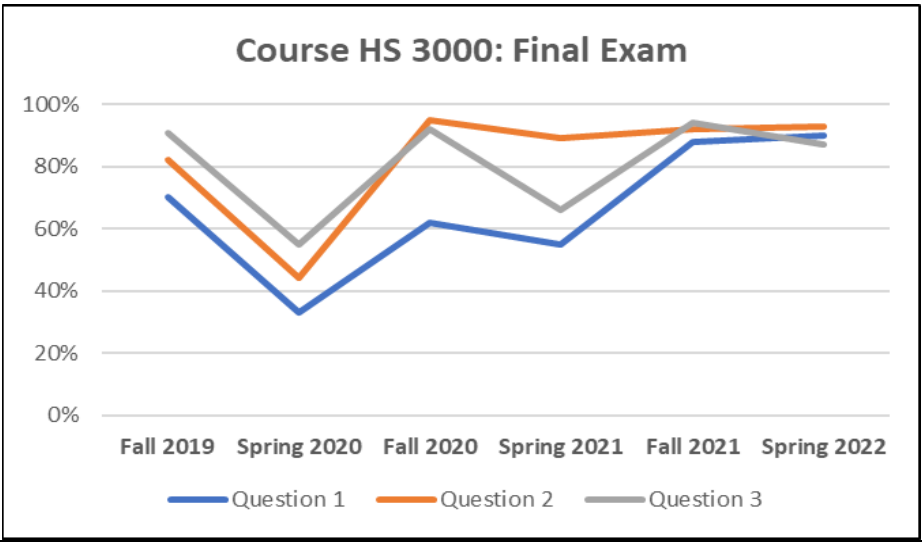
- Last year, we planned to focus on improving students' understanding of the spread of infectious diseases and the functioning of the immune system. Specifically, we planned to add additional lecture content, incorporate formative assessments, and develop micro-learnings on topics where students were struggling, and offer periodic check-ins with faculty.
- In fall and spring, we added additional lecture content in HS 3000 pertaining to infectious diseases and several faculty incorporated formative assessments related to this topic.
- We also developed micro learnings for HS 3010 that were available on topics where students were struggling the most. They provided further review before an exam. The students responded well, and it worked effectively. These micro learnings will be embedded in D2L courses next semester (used for all modalities, including face-to-face).
- We implemented periodic check-ins with faculty. The "bookme.com" website is being used. Students can book a 30-minute session virtually to ask questions. There has been a significant increase in interaction between the student and professor. We hope this will increase student learning as well.

Full Report Addendum (if required per the Cohort Schedule)

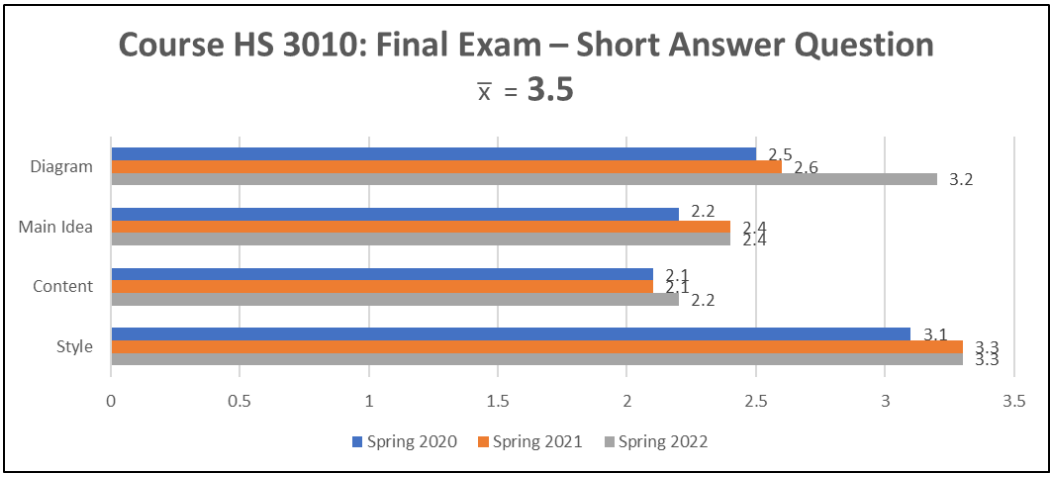
Every 3 years (per the Cohort Schedule), two additional report items are required for the full report: 1) a summary and interpretation of the last 3 years of assessment results, and 2) the strategies for improvement that will be implemented over the next 3-year period. Please contact the Assessment Office at assessment@kennesaw.edu if you have any questions about your program's cohort or the Cohort Schedule.

INTERPRETATIONS AND TRENDS: What trends and/or improvements have been observed over the last 3 years?
Include a summary and interpretation of results over the last 3 years. • Comparative graphs help illustrate trends over time.

Measure 1: Scores on all three questions have improved significantly over the last three years. They seem to have leveled off a bit, so we will need to monitor whether there is still room for improvement on these items or whether we should focus our improvement efforts in other areas.



Measure 2: On the short answer question, students have improved on the *Diagram,* but we must continue to strengthen students' skills in the other areas, especially concerning *Main Idea* and providing concrete *Content* in an essay. There has been little improvement in these areas. Our goal as a department is to increase the percentage in each of these areas next year and continue to do so for each assessment cycle. On the other hand, students continue to excel in their writing *Style*.



STRATEGY FOR IMPROVEMENT: How do assessment results inform changes in teaching strategies and/or curriculum? What strategy for improvement will be implemented during the next 3-year cycle?
Strategies should be specific and related to student learning (not just to the assessment process). • Include the general timeline for implementation, resources needed, and how potential barriers will be addressed. • Describe the process used to involve faculty in purposeful reflection about pedagogical changes and the planning of action steps. • Although not required, supplemental information may be included in the Appendix (i.e., mission statement, strategic plan, annual report, faculty meeting minutes, etc.).

During the past 3 years, we devoted time in our faculty program meetings to discussing several ideas about how to improve SLO1. In previous semesters, it was determined that we were not covering material to the extent needed, and it was addressed by adding an additional lecture on infectious diseases. Also, most faculty teaching HS 3000 incorporated formative assessments in their classes, which significantly improved student learning. While we saw improvement in general knowledge in human anatomy and physiology in HS 3000, we would like to see improvements in our measures for HS 3010. When we discussed this in a faculty meeting, a suggestion was made to offer students more opportunities to express their understanding of ideas and concepts in writing. For example, it may be helpful to incorporate the use of the minute paper as a formative assessment that asks students to write the main idea from a lecture.

Because students are still struggling with the *Main Idea* and *Content* criteria in the HS 3010 measure, we plan to provide more opportunities for students to explain ideas and concepts in a written format. As discussed in a faculty meeting, the following strategies will be implemented in the next 3-year period:

- Add discussion questions and/or additional assignments related to the functioning of the immune system to reinforce content and scaffold across the curriculum.
- Encourage faculty to use written formative assessments in HS 3010, such a minute paper, to provide students with opportunities to practice explaining ideas, concepts, and processes in writing.

We also plan to make changes to our assessment plan. When reviewing the findings, faculty noted that we are only assessing a limited scope of knowledge in human anatomy and physiology. A suggestion was made to include all questions from the comprehensive final exam in HS 3000 and to analyze the scores on the final exam using subsets of questions covering each of the main areas in human anatomy and physiology.

Student Learning Outcome 2

STUDENT LEARNING OUTCOME: What will students know or be able to do upon completion of the program?
For continuous improvement, select a critical knowledge or skill area where students are struggling (there is a need for improvement). • Focus on one knowledge/skill area per outcome. • Use clear, concise language and action verbs (see Bloom's Taxonomy). • Learning outcomes should align with the expected level of rigor for the course and degree.

Students will use appropriate scientific methods to develop a research study that examines a biomedical health problem.

MEASURES: How is evidence of the outcome collected?
Two measures are required. Include at least one direct measure for each SLO. Direct measures include exam items, rubric items, internship or clinical supervisor ratings. Indirect measures: survey/focus group questions and self-assessments. • Measures may be quantitative or qualitative. • Include assignment descriptions and assessment instruments in the Appendix and label them clearly. • Course grades and passing rates are too holistic and not effective measures of student learning outcomes.

Measure 1 - *What is the course name/number and time frame for data collection (i.e., Fall, Spring, Summer semesters)?*

Spring 2022 Course HS 3020

How is the data obtained? • Identify the specific exam, rubric, or survey items that pertain to the learning outcome (i.e., Capstone Project Rubric - Items 3 and 7). • Describe the process for artifact sampling (i.e., all students sampled vs. a subset of students sampled using a sampling procedure).

Research Project: *Research, summarize, analyze, and evaluate a research question of your choosing. Write a summary of the materials necessary. You should also include analysis and evaluation of the questions using research, examples, and data wherever possible.*
Faculty-Assessment using the *Research Project Rubric* in the Appendix (items *Technical Framework, Organization*, and *Conclusions*).
All students are sampled in the course across all sections.

Is this measure direct or indirect? ☑ Direct ☐ Indirect
Are all assignment descriptions, exam items, and rubrics included in the Appendix and clearly labeled? ☑ Yes ☐ No
If no, please explain.

Measure 2 - *What is the course name/number and time frame for data collection (i.e., Fall, Spring, Summer semesters)?*

Spring 2022 Course HS 3020

How is the data obtained? • Identify the specific exam, rubric, or survey items that pertain to the learning outcome (i.e., Capstone Project Rubric - Items 3 and 7). • Describe the process for artifact sampling (i.e., all students sampled vs. a subset of students sampled using a sampling procedure).

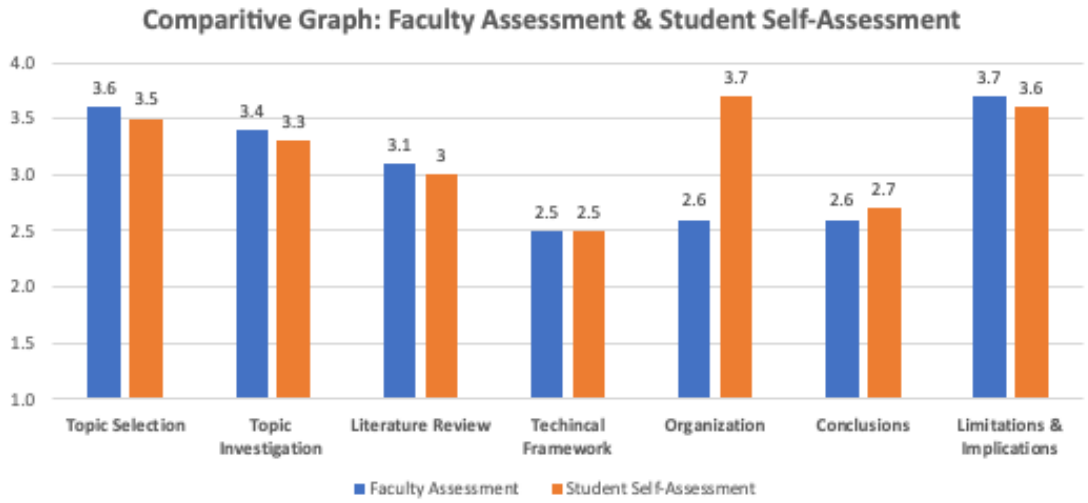
Research Project: *Research, summarize, analyze, and evaluate a research question of your choosing. Write a summary of the materials necessary. You should also include analysis and evaluation of the questions using research, examples, and data wherever possible.*
Self-Assessment using the *Research Project Rubric* in the Appendix (items *Technical Framework, Organization*, and *Conclusions*). The self-reflection questions below will also be summarized according to themes.

Self-Reflection Questions:
- *With regard to this project, what parts were the easiest for you?*
- *Where did you struggle the most?*
- *What questions do you still have about this project or the learning material covered in this course?*

Is this measure direct or indirect? ☑ Direct ☐ Indirect
Are all assignment descriptions, exam items, and rubrics included in the Appendix and clearly labeled? ☑ Yes ☐ No

If no, please explain.

RESULTS: What are the results for each measure? What are the big "take-aways" from these results?
Summarize results for each measure using clear and succinct language. • For quantitative measures, use summary statistics (i.e., counts, means, and/or frequency distributions) and include graphs/tables, if applicable. • For qualitative measures, use lists, themes, and/or descriptive narratives, if applicable. • If applicable, list factors that may explain or contribute to these results. • Describe the process used to share and discuss assessment results among faculty.



Self-Reflection Questions – List of Themes

With regard to this project, what parts were the easiest for you?

Selecting and investigating a topic
Completing the *Limitations* and *Implications* portion of the project

Where did you struggle the most?

Struggle with consolidating different methodology
Organizing the research in a way that communicates the main concepts
Finding enough resources to draw conclusions

What questions do you still have about this project or the learning material covered in this course?

Conducting a better Literature Review
Organizing a Literature Review

FORMATIVE ASSESSMENT: Are formative assessments used in the courses that introduce or reinforce the student learning outcome? If so, to what extent? What are some examples of formative assessments that have taken place? What was the impact on student learning?

Formative assessment involves monitoring student learning in real-time so that instructors may modify their teaching and students may improve their learning throughout the course and/or program. • For example, instructors may use test item analysis to see where students struggled the most and add a lecture/activity to address the area of concern. Other examples of classroom assessment techniques include the minute paper, muddiest point, concept map, and classroom opinion polls. • Please discuss the extent to which formative assessment is used in the courses that introduce or reinforce the student learning outcome (ex. percentage of instructors using formative assessment), provide some examples of these formative assessments, and discuss faculty perceptions of the effectiveness of these formative assessments.

- 90% of HS 3020 instructors report using formative assessments. In all sections, instructors scaffold the research project throughout the semester, which helps to provide students with feedback to improve their learning and performance on the final paper. While this approach has been helpful, some instructors took this a step further and added a lecture, set up 1-on-1 meetings, or held small group sessions to fill in any gaps in knowledge for students who struggled with early states of the project. These instructors reported improvements in student learning and final projects because of these formative assessments.
- One instructor reported using D2L learning analytics to examine rubric scores on the literature review assignment. While students scored high on finding appropriate sources (average of 3.6 out of 4), the average rubric score for synthesizing the research findings was low (average of 2.3 out of 4). Based on this finding, the instructor created a guide for synthesizing research findings, adjusted the class schedule to include a 15-minute mini lecture on synthesizing research findings, provided several examples. When the students submitted their next assignment, which included a revised literature review section, the instructor found much improvement in the synthesis of the literature (average of 3.2 out of 4). Given this improvement, the instructor shared this information with other instructors teaching HS 3020.

STATUS OF IMPROVEMENT STRATEGIES: What progress has been made on improvement strategies previously identified?

Please provide an update on the strategies for improvement identified in the last full report. • Identify any adjustments to the strategies or timelines if applicable. • If it is determined that there is no more room for improvement, please indicate changes that will be made to the next academic year's Assessment Plan.

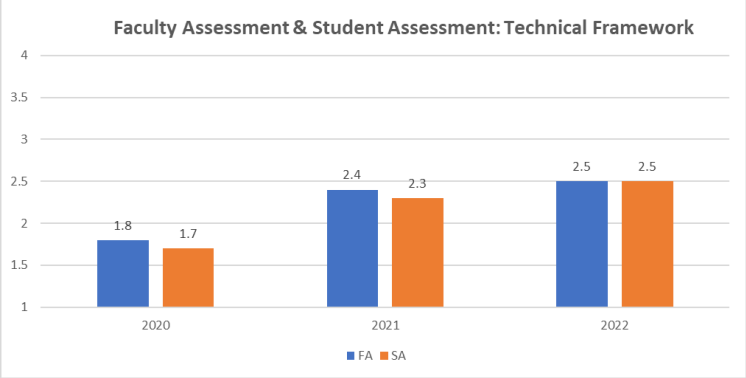
- On our last full report submitted in fall 2019, we identified multiple strategies to improve students' ability to develop a research study using appropriate scientific methods. These strategies focused on providing more feedback to students and adding additional course content to fill in some gaps.
- The self-assessment process was added in fall 2019.
- In spring 2020, the rubric was revised to provide more comprehensive feedback to students and to improve the assessment process. Also, faculty were encouraged to provide students with more opportunities to contact the professor to flush out ideas for their research questions.
- In spring 2020 and fall 2020, short videos were created and integrated into the course material to demonstrate how to conduct research and use tools to organize research. As courses were moved online due to the pandemic, developing short video lectures on certain topics was necessary. From those video lectures, we decided to keep several of them as additional resources in D2L for all semesters going forward.

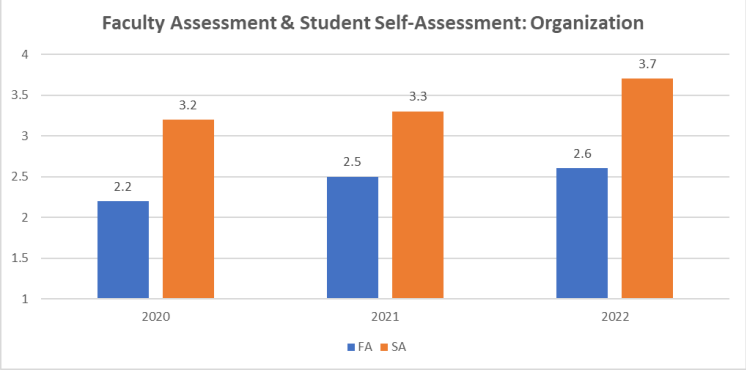
Full Report Addendum (if required per the Cohort Schedule)

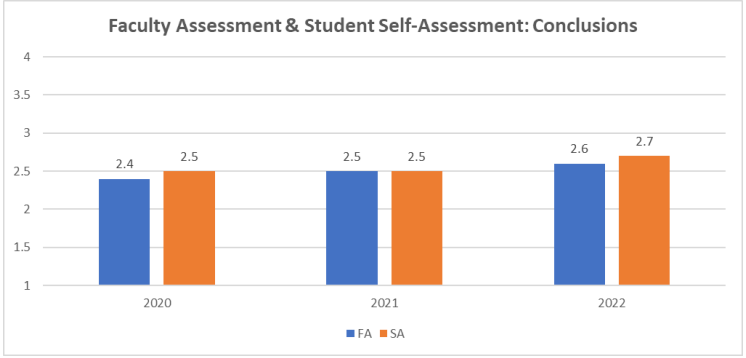
Every 3 years (per the Cohort Schedule), two additional report items are required for the full report: 1) a summary and interpretation of the last 3 years of assessment results, and 2) the strategies for improvement that will be implemented over the next 3-year period. Please contact the Assessment Office at assessment@kennesaw.edu if you have any questions about your program's cohort or the Cohort Schedule.

INTERPRETATIONS AND TRENDS: What trends and/or improvements have been observed over the last 3 years?
Include a summary and interpretation of results over the last 3 years. • Comparative graphs help illustrate trends over time.

On the graphs below, it is evident that students are struggling on *Technical Framework, Organization,* and *Conclusions*. There was good agreement between faculty and self-assessment scores on *Technical Framework* and *Conclusions,* but not so much on *Organization*. Students rated themselves much higher on *Organization*. There is an apparent disconnect between what the professor expects and what the students demonstrate. We need to explore whether expectations need to be clarified or whether students need to develop additional skills in this area. For the analysis of the self-reflection questions, students reported struggling with consolidating different methodology, organizing the research in a way that communicates the main concepts, and finding enough resources to draw conclusions.







*FA= Faculty Assessment SA= Self-Assessment

STRATEGY FOR IMPROVEMENT: How do assessment results inform changes in teaching strategies and/or curriculum? What strategy for improvement will be implemented during the next 3-year cycle?
Strategies should be specific and related to student learning (not just to the assessment process). • Include the general timeline for implementation, resources needed, and how potential barriers will be addressed. • Describe the process used to involve faculty in purposeful reflection about pedagogical changes and the planning of action steps. • Although not required, supplemental information may be included in the Appendix (i.e., mission statement, strategic plan, annual report, faculty meeting minutes, etc.).

During the August faculty meeting, we discussed the assessment results. In previous semesters, it was determined that we were not covering material to the extent that it needed to be, and it was addressed. Faculty agreed that the content of the course is now sufficient; however, improvement in student learning is still needed. Therefore, faculty discussed focusing on providing students with more feedback and making sure they understand the feedback and use the feedback effectively to improve on future assignments. Specifically, we agreed to implement the following strategies during the next 3-year cycle:

- Additional practice exercises and discussion questions related to Technical Framework, Organization, and Conclusions will be implemented in the future. We will work through practice problems in pairs or small groups during class.
- Students will analyze research articles. As a class, we will discuss how the examples are organized and discuss *Technical Framework* as well as what are the strengths in the article.
- Faculty will include an assignment at the beginning of the course that will include a paper prospectus (a brief, structured first-draft plan for term research project) to allow students to think through the steps of the project).
- Students will use concept mapping to outline their research plan, and then introduce their topic to the class in a 3-minute presentation to practice their oral communication.
- Faculty will send weekly notices about office hours to ensure the class is aware of when they are available for further assistance.

Student Success Outcome

In line with KSU's strategic priority related to student success, in 2021, undergraduate programs were asked to select graduation, retention, time to completion, or recruitment to focus on for continuous improvement. In 2022, all academic programs (undergraduate, graduate, and certificate programs) need to select a student success outcome.

STUDENT SUCCESS OUTCOME: For your program, which area of student success has the greatest need for improvement? *When writing the outcome, use improvement language (i.e., Improve student retention, Increase graduation rate, Decrease time to completion, Increase enrollment/recruitment).*

For our program, we are focusing on improving student retention.

MEASURES: How will student success measures be collected? *For AY 2022, we are asking all programs to identify one student success measure that can be tracked over time and used to inform the program's student success strategy (ex. course DFWI rates). Also, programs who developed their own student success measure last year (from a student survey, focus group, etc.) should report on that measure as well.*

Measure 1

For AY 2021, undergraduate programs were asked to develop a measure that would help them understand their selected student success outcome (this was optional for graduate and certificate programs). • This measure should have been developed in fall 2021 and evidence of the measure should have been collected in spring 2022. • Describe this measure.

We have been focusing on increasing our program's retention rate and we conducted a focus group during spring 2022. The focus group was conducted to learn more about students' perceptions of the program. Question prompts:

- *Do you feel that you are getting the skills you need to be successful in your career?*
- *What do you like about the program?*
- *What do you dislike about the program?*

Measure 2

Select one measure you will be able to track yearly and use to inform your student success strategy. • You may select a measure from the student success data dashboard, Institutional Research, or a measure that you develop on your own. • Describe the measure and how it will inform your student success strategy. • Note: If measure 1 is a measure you will be able to track yearly (ex. items from a yearly exit survey of graduating seniors) and it will be able to inform your student success strategy, then you do not need to select an additional measure (you just need to clarify that you will be able to report on measure 1 yearly).

Using the student success dashboard, we will use the "highest 5 DFWI" rate data and the "major changes" data. Since our retention rate drops significantly after the second year, we will use the highest 5 DFWI rate data to examine if students are having a difficult time being successful in some of the foundational courses in the major. Also, by looking at the data for the number of students who switch from our major to another major at KSU, we will be able to understand where our students are going when they leave our program.

RESULTS: What were the AY 2022 results?

Summarize results for your measure(s) using clear and succinct language. • For quantitative measures, use summary statistics (i.e., counts, means, and/or frequency distributions) and include graphs/tables, if applicable. • For qualitative measures, use lists, themes, and/or descriptive narratives, if applicable.

Measure 1: Focus Group Themes

Do you feel that you are getting the skills you need to be successful in your career?

Positive Themes

Believe that I am able to apply knowledge to relevant issues facing the field today
I am becoming more detail-oriented
I am able to use my critical thinking skills

Negative Themes

Topics in class are not discussed in-depth before moving on to the next topic
Deciding on whether this will be a good, lucrative career fit in the long run
Using this program as a stepping-stone to be admitted in first choice university

What do you like and dislike about the program?

Positive Themes

Satisfied with the support services
Enjoy the professors and feel connected to them and the learning material
Enjoy the technological resources available

Negative Themes

Difficult to enroll in classes needed
Time Commitment is demanding
Difficult to complete the required internship when working full-time

Measure 2a: Highest 5 DFW

Highest 5 DFW				
Fall 2021				
Course	Students	DF	W	**DFWI**
HS 2010	294	19%	15%	**35%**
HS 3000	60	22%	10%	**32%**
HS 3305	60	20%	5%	**25%**
HS 3025	60	13%	12%	**25%**
HS 4012	28	10%	13%	**23%**

Measure 2b: Major Changes

Major Changes			
Came from	**Went To**	**# Students**	**% Internal transfer**
Health Science		**642**	**100.00%**
	Public Health	84	**13.08%**
	Psychology	61	**9.50%**
	Biology	45	**7.01%**
	Sociology	35	**5.45%**
	Management	32	**4.98%**
	Communications	26	**4.05%**
	Sport Management	23	**3.58%**
	Other	336	**52.34%**

STATUS OF IMPROVEMENT STRATEGY: What progress has been made on your student success strategy?
Please provide an update on the student strategy implemented for your program. • Identify any adjustments to the strategies or timelines if applicable.

- In spring 2022, faculty who teach the two courses with the highest DFWI rates met monthly to examine the curriculum and assessments used in these courses. Faculty shared teaching resources and strategies. Course improvements are planned to be implemented in fall 2022. See full report section for a discussion of future plans for this strategy.
- Other faculty met to generate ideas for creating more engagement opportunities for our majors and to consider alternative experiential learning opportunities (ex. undergraduate research opportunities, service-learning opportunities, etc.) for students who are not able to complete an internship. See full report section for a discussion of future plans for this strategy.
- Faculty were encouraged to post a comprehensive list of student support services in D2L to increase awareness of support services such as, tutoring, the writing center, etc.
- In fall 2021 and spring 2022, we paired all PT and LTI faculty with a faculty mentor to provide them with more support (ex. syllabi review, course observations and feedback, etc.). Although the mentoring was well-received, we do not have the funding needed to continue the mentoring program.

Full Report Addendum (if required per the Cohort Schedule)

Every 3 years (per the Cohort Schedule), two additional report items are required for the full report: 1) a summary and interpretation of the results over the last 3 years, and 2) the strategies for improvement that will be implemented over the next 3-year period. Please contact the Assessment Office at assessment@kennesaw.edu if you have any questions about your program's cohort or the Cohort Schedule.

INTERPRETATION: What are the big "take-aways" from the student success data?

Include a summary and interpretation of results over the last 3 years. • Comparative graphs help illustrate trends over time. • If you used the First-Time Full-time Retention and Graduation Report from Institutional Research for baseline data, please include the report in the text box below or in the appendix. • List factors that may explain or contribute to your findings. • Describe the process used to share and discuss the student success data among faculty.

In 2021, we examined the First-Time Full-Time Retention and Graduation Report from Institutional Research and found that the retention rates for our Fall 2017 cohort were 82.2% (1-year), 68.5% (2-year), and 52.5% (3-year).

Cumulative Graduation/Retention Rates for First-Time Full-Time Students
Example Report: B.S. in Health Sciences

Cohort			Retention Rate After-			After 4 Years		After 5 Years		After 6 Years		Attrition
Fall	Headcount	Adjusted Cohort	1 Year	2 Years	3 Years	Graduated	Retained	Graduated	Retained	Graduated	Retained	
2007	250	249	79.4	55.9	55.9	8.8	35.3	17.6	14.7	23.5	11.8	64.7
2008	244	243	76.7	66.7	73.3	16.7	53.3	50.0	20.0	53.3	13.3	33.3
2009	242	241	75.5	64.2	54.7	20.8	32.1	34.0	13.2	41.5	3.8	54.7
2010	240	238	88.0	66.0	62.0	26.0	34.0	40.0	18.0	46.0	14.0	40.0
2011	240	239	71.4	57.1	54.0	19.0	31.7	34.9	14.3	42.9	6.3	50.8
2012	238	237	74.7	65.3	61.3	18.7	37.3	40.0	14.7	46.7	5.3	48.0
2013	236	235	79.0	71.0	62.9	22.6	41.9	40.3	21.0	50.0	4.8	45.2
2014	239	238	78.0	68.0	60.0	22.0	36.0	36.0	14.0	48.0	6.0	46.0
2015	242	241	81.5	68.5	55.6	19.4	38.9	42.6	12.0	47.2	7.4	45.4
2016	245	244	78.2	61.4	55.4	28.7	23.8	44.6	4.0			
2017	220	219	82.2	68.5	52.5	35.6	24.8					
2018	235	234	74.1	61.2	50.6							
2019	229	228	79.2	69.5								
2020	210	209	72.5									
2021	218	217										

As a result, we developed a multi-stage strategy to improve our retention rates. As part of our first stage, we used information collected from focus groups to learn about students' perceptions of our program. We also examined the DFWI rates in our courses to see if there were certain courses in which students were struggling.

From the focus groups, we learned that students report favorable opinions about our curriculum, faculty, and support services, but the feedback indicated that students are experiencing difficulties with enrollment and struggling with the workload/time commitment. Also, students who work full-time find it difficult to complete the required internship. Since we only conducted focus groups in spring 2022, we do not have 3-year comparison data.

Using the student success dashboard, we found that the DFWI rates are highest in two of our foundational courses in the major (HS 2010 and HS 3000). Since the dashboard includes data from fall 2021 and fall 2020, we compared two years of data and found the DFWI rates have been consistent in these courses.

Highest 5 DFW				
Fall 2020				
Course	Students	DF	W	**DFWI**
HS 2010	265	22%	14%	**36%**
HS 3000	60	20%	11%	**31%**
HS 3305	60	17%	8%	**25%**
HS 3025	60	11%	10%	**21%**
HS 4012	30	13%	10%	**23%**

Highest 5 DFW				
Fall 2021				
Course	Students	DF	W	**DFWI**
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HS 3000	60	22%	10%	**32%**
HS 3305	60	20%	5%	**25%**
HS 3025	60	13%	12%	**25%**
HS 4012	28	10%	13%	**23%**

In 2022, we also started examining the "major changes" data from the student success dashboard. Here we found that 13% of our health science majors changed their major to public health and 10% changed their major to psychology. Since we just started collecting this data, we do not have comparative data on this measure.

We discussed these findings at our August faculty meeting and collectively came up with some possible explanations for the findings. When considering the qualitative findings from the survey (struggling with the workload/time commitment) and the 35% DFWI rate in HS 2010, we considered the possibility that students may not be prepared for the challenging nature of some of our foundational courses. Instead of retaking these courses to earn a C or higher, some students may decide to change majors (especially if they earned a D and can use the class(es) in their free elective area).

STRATEGIES FOR IMPROVEMENT: What strategy for improvement will be implemented during the next 3-year cycle?
Strategies should be specific and related to student success (not just to the assessment process). • Include the general timeline for implementation, resources needed, and how potential barriers will be addressed. • Describe the process used to involve faculty in purposeful reflection about pedagogical changes and the planning of action steps. • Although not required, supplemental information may be included in the Appendix (i.e., mission statement, strategic plan, annual report, faculty meeting minutes, etc.).

During the August faculty meeting, we reviewed our student success results and discussed strategies for improvement. We decided to focus on the following for the next 3-year cycle:

1) Continue to monitor courses with high DFWI rates to determine if the course improvement strategies implemented are effective; adopt new improvement strategies (if needed).
    a. Timeline: Implement strategies in fall 2022 and spring 2023, review fall DFWI rates at the end of spring 2023; continue strategies and/or implement new strategies in fall 2023 and fall 2024.
    b. Resources needed: Data, faculty lead for each course, faculty input, new strategies (if needed).
    c. Potential Barriers: N/A
2) Offer discipline-specific tutoring for our majors.
    a. Timeline: Hire and train tutors at the beginning of each year/semester (starting fall 2022). Track student use of tutors to determine if continued funding is justified.
    b. Resources needed: Funding and students interested in the tutoring positions.
    c. Potential Barriers: Recruiting and retaining student assistants can be challenging. To address this potential barrier, we will ask our faculty to discuss the opportunity with current students and encourage them to apply for the tutoring positions. We will aim to hire students who can serve as tutors for two semesters.
3) Offer undergraduate research and/or service-learning opportunities in courses.
    a. Timeline: Fall 2022 - Identify courses for undergraduate research and/or service-learning opportunities and identify faculty interested in teaching these courses. Spring 2023 – Offer at least one course for undergraduate research and/or service learning. Use Spring 2023 course feedback from students and instructor(s) to guide future course offerings.
    b. Resources needed: Faculty who are willing and able to develop research and/or service-learning projects and community partners (for service-learning projects).
    c. Potential Barriers: Developing undergraduate research and/or service-learning courses can be time-consuming. Faculty who develop the courses need to be provided with the support needed.
4) Establish a student advisory council in order to gain continuous input from our students about our program.
    a. Timeline: Fall 2022 – Establish the expectations for the advisory council and the selection process and start recruiting students. Spring 2023 – Start holding advisory council meetings.
    b. Resources needed: A diverse group of majors interested in serving on the advisory council.
    c. Potential Barriers: Our students have busy schedules (balancing work, school, and other responsibilities) and it may be difficult to find students available to meet on campus on a regular basis. While in-person meetings are preferred, it may be helpful to hold most meetings virtually to increase students' ability to participate.

Appendix

Please include all assessment measures in the Appendix (i.e., exam items, rubrics, internship/clinical supervisor evaluation, surveys, etc.). If applicable, also include any relevant aggregated results or other attachments (such as mission statement, meeting minutes, annual or strategic plan, etc.). Please label all measures, aggregated results, or other supplemental items clearly.

Student Learning Outcome 1
Measure 2: Short Answer Essay Question Rubric

	4 (A)	3 (B)	2 (C)	1 (D/F)
Diagram	All terms are identified and placed correctly.	Most terms are identified and placed correctly.	Most terms are identified correctly, but most are not placed correctly.	No/few terms are identified and placed correctly.
Main Idea	Main idea is clear and supported.	Main idea is stated with little support.	Main idea is vague and weakly supported.	Main idea is not explained correctly.
Content	Exceptionally well-presented; explanation is detailed, well developed, and supported with specific evidence and facts.	Well-presented; explanation is detailed, developed, and mostly supported with specific evidence and facts.	Explanation is vague and weakly supported with only a few specific facts.	Explanation is not supported with specific evidence and facts.
Style	Sentences are clear and varied in pattern, from simple to complex, with excellent use of punctuation.	Sentences are clear but may lack variation; a few may be awkward and there may be a few punctuation errors.	Sentences are generally clear but may have awkward structure or unclear content; there are multiple punctuation errors.	Sentences are not clear.

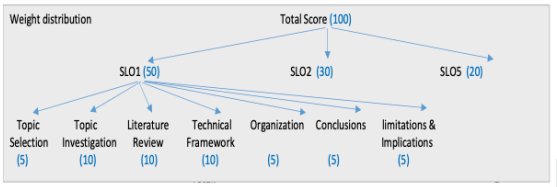
Student Learning Outcome 2
Measure 1 & 2: Research Project Rubric

Rubric for Research proposal (thesis & project options for MSCS Program) - for assessment of SLOs 1, 2, 5

SLO for MSCS program:

1. Students will have the competence to examine a problem and design a methodology to achieve a solution.
2. Students will have the competence to assess the performance of a computational artifact, entity, or process.
3. Students will have the competence to work toward a common objective in a team and contribute effectively.
4. Students will have the competence to communicate their thoughts and ideas to varied audiences, both orally and through written material
5. Students will have the knowledge and skill for independent learning and professional development.

Total:



Assessment	4	3	2	1	Student Raw Score Earned
Topic Selection	Student identified the topic	Faculty identified the topics and the student participated in selecting a topic	Student showed interest/eager to investigate a topic assigned for further investigation	Student was neutral in the topic selection	10
Topic investigation	Student was creative and focused in investigating the topic, and identified significant aspects of the research topic not explored previously	Student was focused in investigating the topic, and identified aspects of the research topic that were explored previously (or currently), which merit further investigation (i.e., continuation of a research topic)	Student was able to investigate aspects of the research topic that are either too narrowly defined to lead to tangible contribution, or are too widely defined without much focus or manageability	Student was unable to identify aspects of the research topic that merit further investigation	10
Literature review	Student synthesized (compare, contrast, limitation) in-depth information from relevant sources, discussing and presenting different points of view	Student offered in-depth information from relevant sources and cited different points of view	Student offered information from various sources with limited citations and points of view	Student provided general and non-technical information from various sources with limited contribution and points of view	10
Technical framework	Student included all elements of the theoretical framework, methodology, and in depth contribution of the research topic	Student included theoretical framework, methodology, and contribution loosely but with some focus	Student missed some critical elements of the research topic or the methodology, or some technical aspects were not developed correctly	Student misunderstood the research topic, did not provide the technical framework, or lacked the proper methodology	10
Organization	Student conveyed various facets of the research topic professionally by presenting the research problem clearly, synthesizing insightful patterns (differences and similarities), creating and transitioning between paragraphs/sections skillfully, using competent grammar (e.g., word choices, writing style, flow of ideas), and by keeping broader audience in mind.	Student organized various facets of the research topic and used proper grammar, but in synthesizing various research elements to reveal important aspects of the research, the organization and transitions among sections needed improvement	Student provided some facets of the research topic using proper grammar, but the organization and explanation lacked cohesiveness to reveal importance aspects of the research topic	Student provided little or some generic information about the research topic, or used poor grammar, making it difficult to comprehend the essence of the research topic	10
Conclusions	Student presented insightful and skillful conclusions extrapolated from the technical framework, the methodology, and the contributions of the proposal, leading to the future research directions.	Student provided conclusions directly from the research topic and its framework that focused solely on the research topic and findings, with limited reference to the broader merit and impact of the research topic	Student reached a conclusion that is generic, with limited focus and reference to the future implications of the project	Student reached at vague and unsupportable conclusions, with little or no focus to the overall merit or implications of the research topic.	10
Limitations & Implications	Student insightfully discussed the relevant limitations, the implications of the research topic, and provided supportive evidence	Student discussed relevant limitations and implications of the research topic.	Student discussed some general limitations and implications of the research topic	Student showed little understating of the limitations or the implications of the research topic	10
	Student provided all of the evaluation elements to assess the performance of the implemented methodology skillfully and independently, and/or was able to suggest actions during the course of proposed implementation in light of new findings.	Student provided the performance evaluation elements with some guidance from the supervisory committee members	Student provided the performance evaluation elements with continuous assistance from the supervisory committee members	Student was not able to or had difficulty proposing the performance evaluation elements, which required direct intervention and constant assistance from the supervisory committee members	10
	Student showed independence swiftly throughout the proposal development. Throughout this process, the student learned to be an independent thinker, and learned the skills to investigate technical literature with confidence for future research and professional development.	Student showed independence gradually and steadily but needed some guidance throughout the proposal development. The student learned the skills to be a critical thinker and investigate technical literature for future research problems and professional development but with limited confidence	Student showed some difficulty working independently and required guidance often throughout the project development. The student showed some difficulty in critical thinking and literature investigation as the means for future research and professional development.	Student was not able to work independently throughout the proposal development. The student needed continuous guidance and had difficulty producing an acceptable proposal, and/or to be a critical investigator, which is necessary for future professional development.	10
Student Weighted Total Score					100