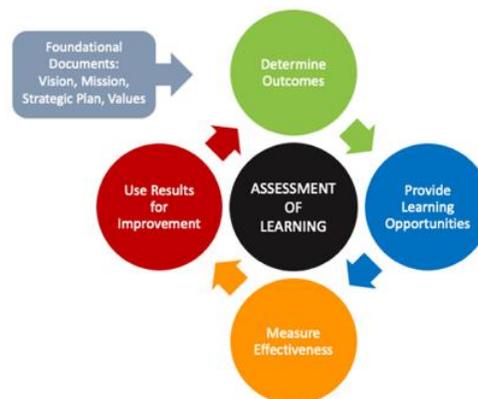


Guided by our vision, mission, and strategic plan, Kennesaw State University, strives to continuously improve the quality of all aspects of the institution. [Assessment of Learning](#) is the process by which faculty demonstrate a commitment to continuous improvement in student learning and student success.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

For the AY 2021 report, programs will use this revised template, which includes:

- [Student Learning Outcome 1](#)
- [Student Learning Outcome 2](#) (3rd SLO is optional)
- [Student Success Outcome](#) (choice of focus)
- 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
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.

Due to COVID-19, we continued the online format of our courses. It may have been challenging for students to handle all their school and family responsibilities, in addition to the fears and personal responsibilities that exist during a pandemic.

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.

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 with which students struggle (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 identify the major groups of organisms, as well as compare and contrast the characteristics of at least two organisms that differentiate the various domains and kingdoms from one another.

MEASURES: How is evidence of the outcome collected?

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 2021 Course HS 1013

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 1013: Final Exam (percentage of students answering each question below correctly)

1. What are the major groups of microorganisms?
 - a) Bacteria, archaea, fungi, protozoa, algae, viruses
 - b) Bacteria, archaea, fungi, protozoa, multicellular animal parasites
 - c) Bacteria, archaea, fungi, protozoa, algae, viruses, multicellular animal parasites
 - d) Bacteria, archaea, fungi, protozoa, algae, multicellular animal parasites

2. Where does algae live?
 - a) Water
 - b) Damp soil
 - c) Rocks
 - d) All of the above

3. What are the major shapes that exist for bacteria?
 - a) bacillus (rod shape), coccus (spherical shape), and vibrio (curved shape)
 - b) bacillus (rod shape), spirilla (spiral shape), and vibrio (curved shape)
 - c) bacillus (rod shape), coccus (spherical shape), and spirilla (spiral shape)
 - d) bacillus (rod shape), coccus (spherical shape), spirilla (spiral shape), and vibrio (curved shape)

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 2021 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: *Identify the major groups of organisms, then compare and contrast the characteristics of at least two organisms that differentiate the various domains and kingdoms from one another. Include three ways in which they are helpful and harmful. This must be answered in a short question essay format.*

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 1013: Spring 2021 Final Exam (percentage of students answering each question correctly)

	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021
Question 1	33%	46%	62%	55%	88%	90%
Question 2	60%	70%	95%	89%	92%	93%
Question 3	30%	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 2021 Final Exam – Short Answer Question

	Mean	Count divided by							
		Frequency Count	# of students						
		# of 4s	% of 4s	# of 3s	% of 3s	# of 2s	% of 2s	# of 1s	% of 1s
Main Idea	2.8	11	37%	4	13%	12	40%	3	10%
Argument	2.4	6	20%	6	20%	11	37%	7	23%
Content	2.2	3	10%	5	17%	16	53%	6	20%
Style	3.1	15	50%	7	23%	5	17%	3	10%

At our spring 2021 faculty meeting, we discussed what can be done to increase rubric scores. Students performed the best on the *Style* and *Main Idea* criteria. However, students are still struggling on the *Argument* and *Content* criteria, which are most related to the actual outcome.

OPTIONAL FOR AY 2021 - FORMATIVE ASSESSMENT: What are some examples of formative assessment that have taken place? What was the impact on student learning?

Formative assessment involves monitoring assessment results in real-time so that instructors may modify their teaching and students may improve their learning throughout the course or program. • Please provide some examples of formative assessment that has taken place related to the outcome and how it has improved student learning.

- Spring 2021 Course HS 1013: During a live class, students created a concept map that provided them with a visual representation, as well as showed them the interconnections amongst microorganisms, algae, and bacteria. 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.
- Spring 2021 Course HS 3010: During a live class, we did a MS Teams “Polly” poll using similar questions from the upcoming exam. Students were able to anonymously answer each question. This quickly showed where students were still struggling, and we 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.

- We added additional lecture content pertaining to the types of organisms.
- We developed microlearnings 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 microlearnings will be embedded in the D2L master course 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.

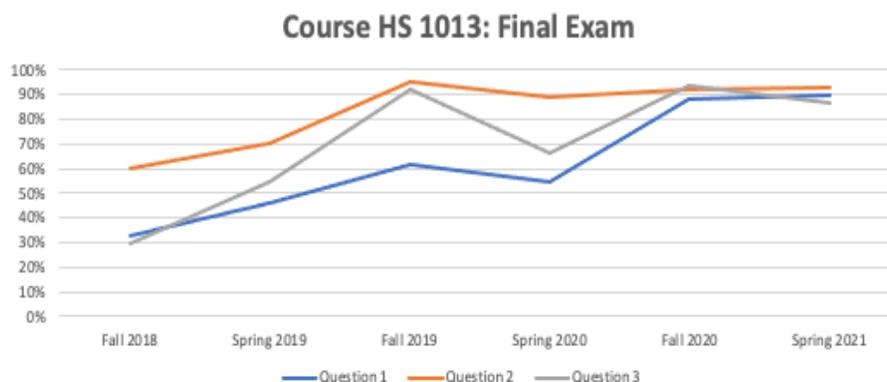
Full Report Addendum (if required per the Cohort Schedule)

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.

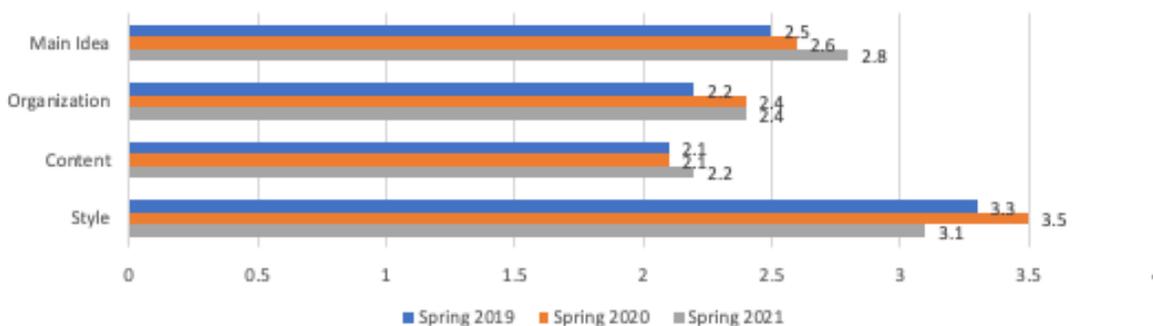


Measure 2: On their short answer essays, students have steadily improved in communicating the *Main Idea*. We must continue to strengthen students' skills in the other areas, especially concerning *Organization* and providing concrete *Content* in an essay. There has been little improvement in these 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 have excelled well in their writing *Style*. However, there was a slight dip in scores for spring 2021, ($\bar{x} = 3.1$) in comparison to spring 2020 ($\bar{x} = 3.5$). For spring 2021, could be the aftereffects of the current pandemic. Overall, this outcome will build a solid foundation for students progressing in the program.

Course HS 3010: Final Exam – Short Answer Question

$\bar{x} = 3.5$



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, several ideas surfaced in faculty discussions about how to improve related to SLO1. In previous semesters, it was determined that we were not covering material to the extent needed, and it was addressed.

Now, we need more time discussing certain components in class. The following strategies will be implemented in the next 3-year period:

- Add a pre-test to help students identify what they do and do not know.
- Add discussion questions related to identifying groups of organisms.
- At an upcoming department meeting, discuss possible assignments that relate to organisms in order to reinforce content and scaffold across the curriculum.
- Because students are still struggling with the *Argument* and *Content* criteria, provide more opportunities for students to compare and contrast two or more constructs in a written and oral format. Ideas that were agreed upon were: short 3-minute presentations during live classes and additional short answer discussion questions.

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 knowledge or skill area with which students struggle (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 examine a problem and design a methodology to achieve a solution.

MEASURES: How is evidence of the outcome collected?

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 2021 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 2021 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:

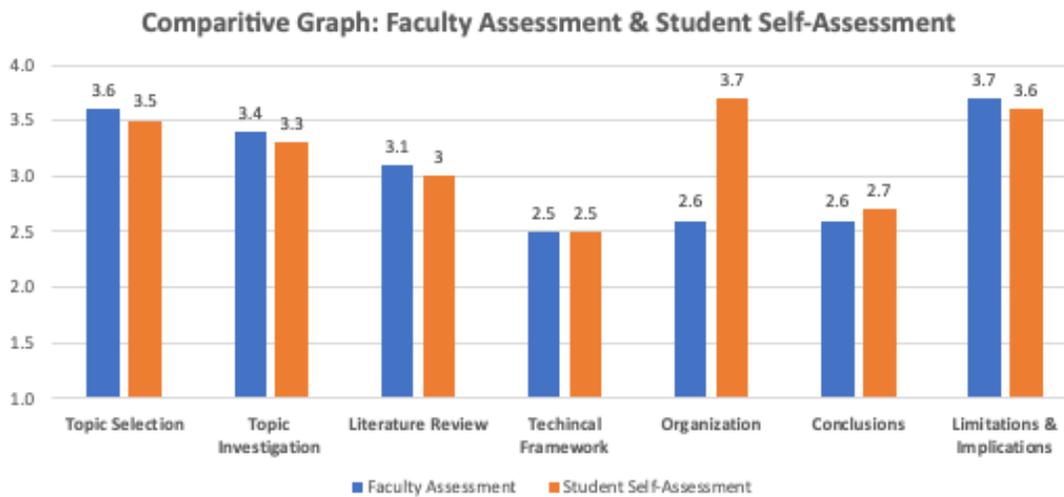
- *With regard to this project, what parts were the easiest for you?*
- *Where did you struggle the most?*
- *What questions do you still have about this project or the learning material covered in this course?*

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

OPTIONAL FOR AY 2021 - FORMATIVE ASSESSMENT: What are some examples of formative assessment that have taken place? What was the impact on student learning?

Formative assessment involves monitoring assessment results in real-time so that instructors may modify their teaching and students may improve their learning throughout the course or program. • Please provide some examples of formative assessment that has taken place related to the outcome and how it has improved student learning.

- Students shared an article that supported their research question. Students who were struggling with this assignment were contacted for a 1-on-1 or small group session to fill in any gaps in knowledge.
- In preparation for the research project, students reviewed a case study together in small groups in class, and made inferences and decisions based on a detailed description of a scenario. This assisted them with organizing their thoughts properly and with writing the different sections of their research summary.

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.

- The self-assessment process was created and piloted during AY 2021.
- The rubric was revised to provide more comprehensive feedback to students and to improve the assessment process.
- Short videos have been integrated into the course material to demonstrate how to conduct research and use tools to organize research.
- Students were given more opportunities to contact the professor to flush out ideas for their research questions.

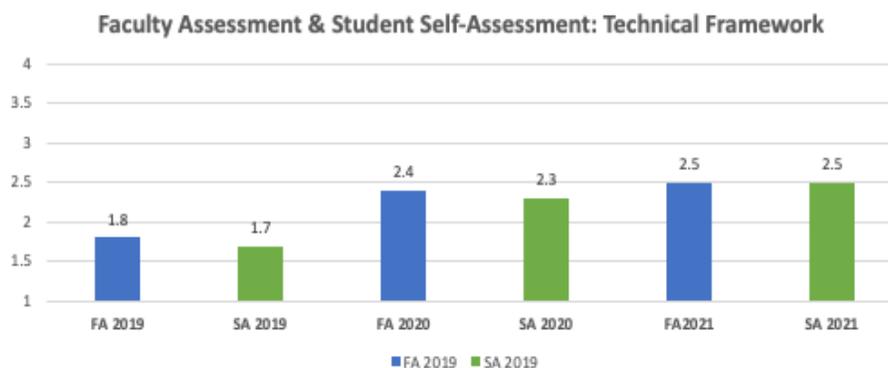
Full Report Addendum (if required per the Cohort Schedule)

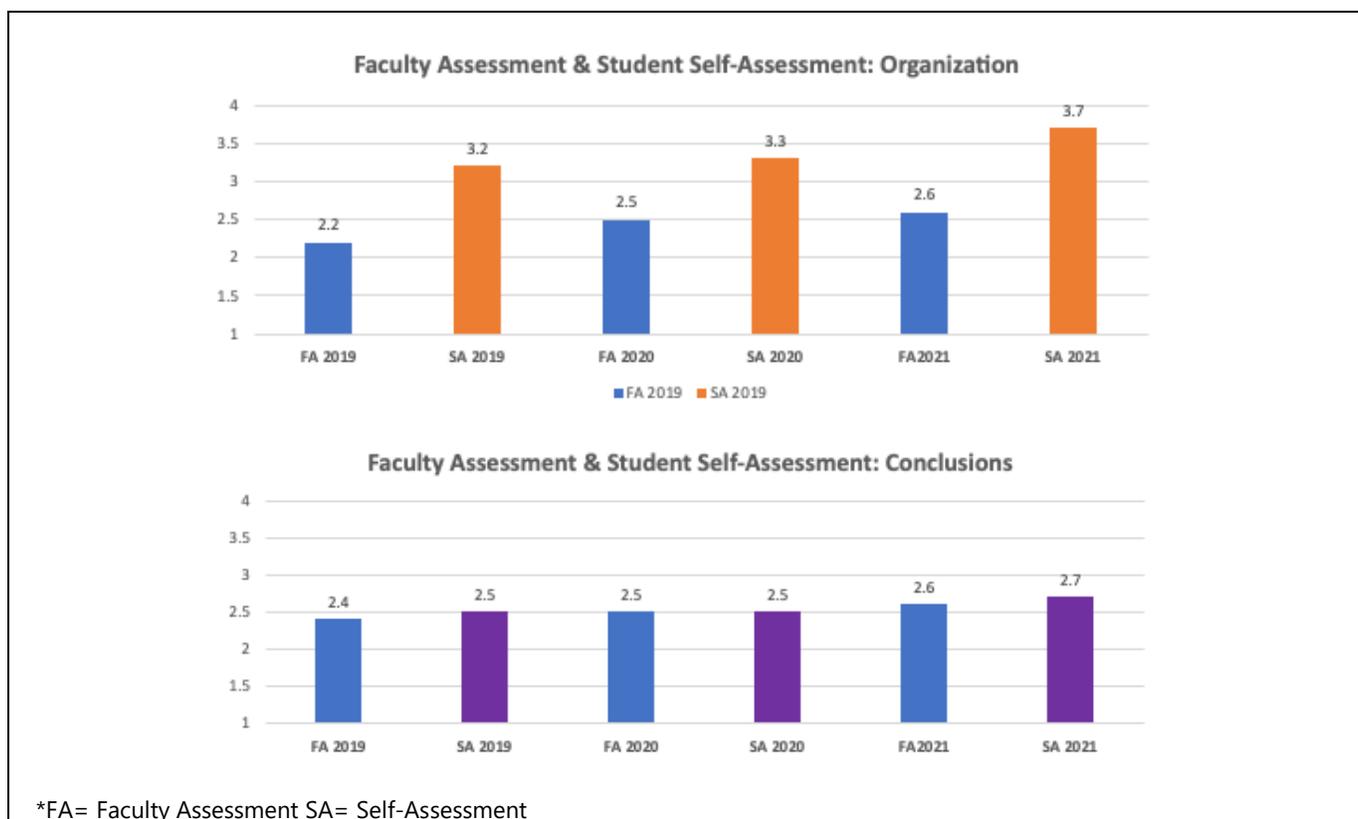
Every 3 years (per the [Cohort Schedule](#)), two additional report items are required for the full report: 1) a summary and interpretation of the last 3 years of assessment results, and 2) the strategies for improvement that will be implemented over the next 3-year period. Please contact the Assessment 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 skill 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.





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.

- 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, academic programs will select graduation, retention, time to completion, or recruitment to focus on for continuous improvement.

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

Increase graduation rate.

MEASURES: How will evidence of the outcome be collected? For AY 2021, only Measure 1 is required for undergraduate programs (data is provided). Reporting of results is optional for graduate and certificate programs for AY 2021.

Measure 1

The **First-Time Full-Time Retention and Graduation Report** has been provided for undergraduate programs. (For AY 2021, this report cannot be provided for graduate or certificate programs, so reporting of results is optional for those programs. However, please identify two measures for AY 2022, such as internal tracking, a survey, and/or a focus group.)

First-Time Full-Time Retention and Graduation Report

Measure 2

The **First-Time Full-Time Retention and Graduation Report** has been provided for undergraduate programs. (For AY 2021, this report cannot be provided for graduate and certificate programs, so reporting of results is optional for those programs. For AY 2022, data may be provided. If not, consider using other Institutional Research data or internal tracking as the first measure.)

We have been focusing on increasing our program's graduation rate and we conducted a focus group during spring 2021. 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?

RESULTS: What were the AY 2021 results? Undergraduate programs should include a screen shot of the **First-Time Full-Time Retention and Graduation Report**. • If your program tracks additional data, please include it below or in the Appendix.

Measure 1:

Kennesaw State University
 First-Time Full-Time Retention and Graduation
 Example Report: B.S. in Health Sciences

Cohort	Cumulative Graduation/Retention Rates for First-Time Full-Time Freshman										Attrition	
	Retention Rate After-			After 4 Years		After 5 Years		After 6 Years				
Fall	Headcount	Adjusted Cohort	1 Year	2 Years	3 Years	Graduated	Retained	Graduated	Retained	Graduated	Retained	
2007	250	249	76.6	61.6	54.6	14.5	37.8	34.5	16.6	42.5	8.3	49.2
2008	244	243	74.8	60.5	53.5	15.4	36.6	33.6	16.2	41.8	7.1	51.0
2009	242	241	76.5	61.4	53.8	15.0	36.6	33.2	16.5	41.0	8.6	50.4
2010	240	238	77.2	61.4	53.6	13.4	37.6	33.1	17.4	41.9	8.1	50.0
2011	240	239	75.9	60.4	53.3	12.5	40.0	33.1	17.3	41.9	8.4	49.7
2012	238	237	75.3	62.0	55.9	13.9	39.8	34.8	17.4	43.4	7.8	48.8
2013	236	235	77.9	64.4	58.2	16.5	39.7	37.1	16.7	46.3	6.9	46.8
2014	239	238	78.2	65.8	59.2	17.7	38.9	38.4	16.7	47.0	7.6	45.4
2015	242	241	80.1	66.2	58.3	17.3	39.6	40.3	15.3			
2016	245	244	78.3	62.3	56.2	18.8	35.8					
2017	220	219	78.5	64.7	58.6							
2018	235	234										
2018	229	228	80.3	68.4								
2019	210	209	79.7									
2020												

Measure 2: 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
Fast-paced program

INTERPRETATION: What are the big “take-aways” from this baseline data? Are the figures higher or lower than expected?

Because baseline data is being reported, this item is required for all Cohorts. • List factors that may explain or contribute to this result. • Describe the process used to share and discuss the student success data among faculty.

We need to address bottlenecks and difficulties with enrollment. Some students are struggling with the workload or the time commitment. Some students are interested in the same program, but at a different university. This may be because this institution was not their first choice. Some students may need to improve their grade point average in order to be admitted into the institution of their choice.

STRATEGY FOR IMPROVEMENT: What specific strategy for improvement will be implemented during the next 3-year cycle to improve this student success outcome?

This item is required for all Cohorts. • Strategies should be specific and related to student success. • Include the general timeline for implementation, resources needed, and how potential barriers will be addressed. • Describe the process used to ensure faculty involvement in purposeful reflection 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).

During the August faculty meeting, we discussed how to improve the student experience and graduation rate.

- Address bottle necks in course scheduling.
- Provide more course sections and times to accommodate students.
- Prerequisites will be reassessed to ensure that students are obtaining the foundational knowledge that they need in preparation for the core courses.
- Ensure sequencing of courses are setting students up for success to improve upon retention and graduation rates.
- Hire additional faculty and adjunct professors.
- Use learning analytics in D2L to identify struggling students; identify and support at-risk students.
- Increase awareness of support services such as, tutoring, the writing center, etc.

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.

	Page
Student Learning Outcome 1	
Measure 2: Short Answer Essay Question Rubric	14
Student Learning Outcome 2	
Measure 1 & 2: Research Project Rubric	15

Student Learning Outcome 1
Measure 2: Short Answer Essay Question Rubric
Grading Rubric for Writing Assignment

Your professor may use a slightly different rubric, but the standard rubric at AUR will assess your writing according to the following standards:

	A (4)	B (3)	C (2)	D/F (1/0)
Focus: Purpose	Purpose is clear	Shows awareness of purpose	Shows limited awareness of purpose	No awareness
Main idea	Clearly presents a main idea and supports it throughout the paper.	There is a main idea supported throughout most of the paper.	Vague sense of a main idea, weakly supported throughout the paper.	No main idea
Organization: Overall	Well-planned and well-thought out. Includes title, introduction, statement of main idea, transitions and conclusion.	Good overall organization, includes the main organizational tools.	There is a sense of organization, although some of the organizational tools are used weakly or missing	No sense of organization
Organization: Paragraphs	All paragraphs have clear ideas, are supported with examples and have smooth transitions.	Most paragraphs have clear ideas, are supported with some examples and have transitions.	Some paragraphs have clear ideas, support from examples may be missing and transitions are weak.	Para. lack clear ideas
Content	Exceptionally well-presented and argued; ideas are detailed, well-developed, supported with specific evidence & facts, as well as examples and specific details.	Well-presented and argued; ideas are detailed, developed and supported with evidence and details, mostly specific.	Content is sound and solid; ideas are present but not particularly developed or supported; some evidence, but usually of a generalized nature.	Content is not sound
Research (if assignment includes a research component)	Sources are exceptionally well-integrated and they support claims argued in the paper very effectively. Quotations and Works Cited conform to MLA style sheet.	Sources are well integrated and support the paper's claims. There may be occasional errors, but the sources and Works Cited conform to MLA style sheet.	Sources support some claims made in the paper, but might not be integrated well within the paper's argument. There may be a few errors in MLA style..	The paper does not use adequate research or if it does, the sources are not integrated well. They are not cited correctly according to MLA style, nor listed correctly on the Works Cited page.
Style: Sentence structure	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 may be patterns of	Sentences aren't clear

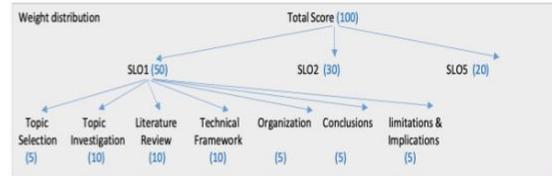
Student Learning Outcome 2
Measure 1 & 2 : Research Project Rubric

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 unsupported 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