

Weber State University
Biennial Report on Assessment of Student Learning

Cover Page

Department/Program:

Academic Year of Report: 2022 and 2023 (covering Summer 2021 through Spring 2023)

Date Submitted:

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The Institutional Effectiveness website hosts a page for each program that displays assessment reports and information. All available biennial assessment and program review reports are located at the bottom of the program's page on our site. As a part of the biennial report process, we ask that you please review your page for completeness and accuracy, and indicate below the changes that need to be made in sections A-E.

Program page link: <https://www.weber.edu/ie/Results/Economics.html>

A. Mission Statement

Information is current; no changes required: **Yes** _____ **No** _____

Update if not current:

B. Student Learning Outcomes

(Please include certificate and associate credential learning outcomes)

Information is current; no changes required: **Yes** _____ **No** _____

Update if not current:

C. Curriculum Grid

(Please review your current curriculum grid and verify that at least one course has been identified for each outcome in which you expect your students to demonstrate the desired competency of a graduating student. This could be shown in a variety of ways: classroom work, clinical or internship work, a field test, an ePortfolio, etc. You may request access to the Google Sheet on our site if that is easiest, or we can make the updates. Please reach out to oiie@weber.edu if you wish to have access)

Information is current; no changes required: **Yes** _____ **No** _____

Update if not current

D. Program and Contact Information

Information is current; no changes required: **Yes** _____ **No** _____

Update if not current: Gavin Roberts, gavinroberts@weber.edu is the new chair of the economics department.

E. Assessment Plan

We have traditionally asked programs to report on outcome achievement by students at the course level. We are encouraging programs to consider alternative assessment approaches and plans that are outcome-based as opposed to course-based, though course-based assessment can continue to be used. A complete assessment plan should include:

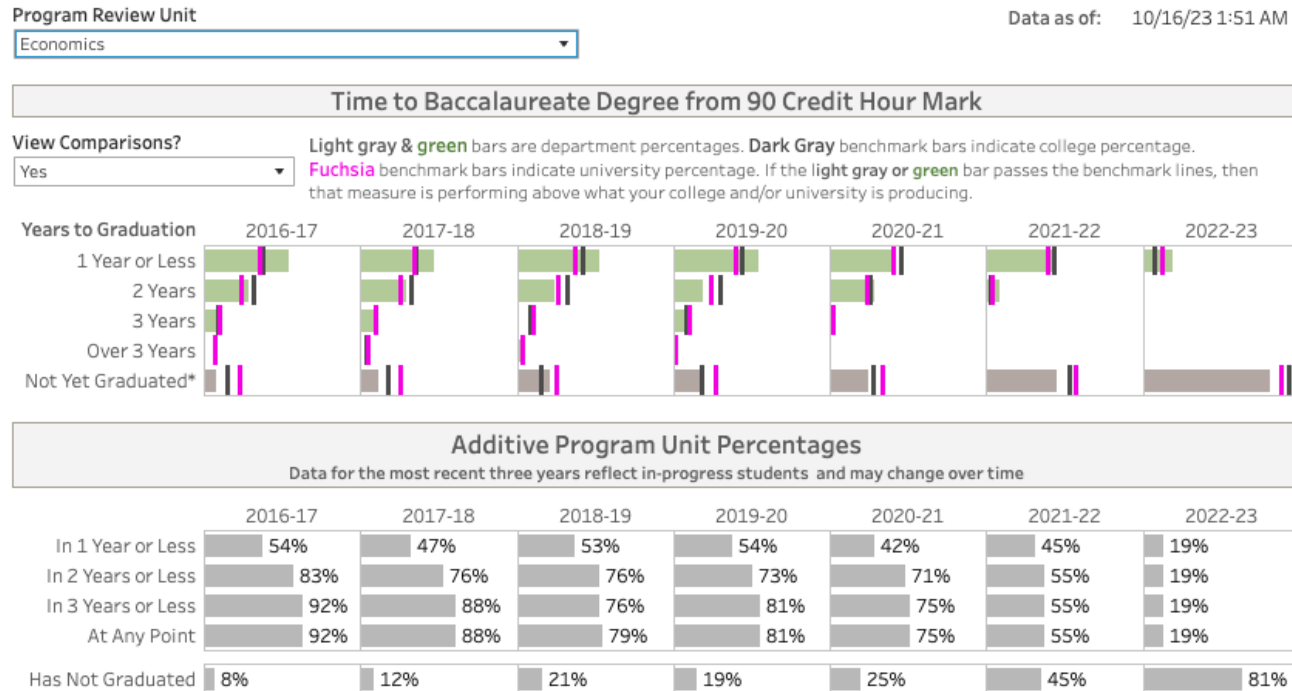
- a timeline (which courses or which outcomes will be assessed each year),
- an overall assessment strategy (course-based, outcome-based, reviewed juries, ePortfolio, field tests, etc.)
- information about how you will collect and review data
- information about how the department/program faculty are engaged in the assessment review.

Information is current; no changes required: **Yes** _____ **No** _____

Update if not current:

F. Student Achievement

Percent and number of students completing degrees within 2 years of achieving 90+ credit hours (or just time to graduation for graduate programs) and a reflection on that metric.



The economics department performed better than the college and university in terms of the 2 Years-to-Graduate graduation rate in the 2020-21 and 2021-22 academic years. The department struggled with that rate in the 2019-20 and 2018-19 years which is likely attributable to volatility around COVID-19 and the large number of international majors. The department has also performed relatively well on the 1-Year-or-Less-to-Graduate graduation rate in all academic years reported other than the 2020-21 year. The department actively reaches out to students with large numbers of credit hours to discuss bottle necks. The department seeks to offer flexible scheduling so required courses are available to students with varied schedules.

G. Evidence of Learning:

Evidence of Learning: Courses within the Major 2021-2023						
<i>Measurable Learning Outcome</i>	<i>Method of Measurement</i>	<i>Target Performance</i>	<i>Actual Performance</i>	<i>Interpretation of Findings</i>	<i>Action Plan/Use of Results</i>	<i>Closing the Loop</i>
<i>Economics majors.</i>						
Learning Outcome 1: Numerically literate and communication skill.	Measure 1: Rubric to evaluate the final research paper in ECON 4980	Measure 1: 80% of all students will meet or exceed expectations	Measure 1: In 2021-2022, 89% of students met or exceeded expectations per rubric. In 2022-2023, 87.5% of students did.	Measure 1: We continue to have the vast majority of students meet this learning outcome.	Continue to monitor progress and focus on area where a small number of students struggle.	
Learning Outcome 2: Use of Statistical Methods *See Appendix D for rubric related to LO2	Measure 1: Evaluation of the use of methods in the final research paper in ECON 4980.	Measure 1: 80% of students will be competent in the methods section of their final paper. Competency defined in Appendix D rubric.	Measure 1: In 2021-2022, 89% of all students were competent on the methods section for their final research paper. In 2022-2022, 87.5% of students were competent.	Measure 1: We updated this measure in Spring 2021 and the outcomes show our students are performing well in terms of statistical methods	Continue to monitor progress and focus on area where a small number of students struggle.	Graduates have had more placement in quantitative industries and graduate programs and have indicated to us that they feel very well prepared for those pursuits.
Learning Outcome 3: Use concepts of demand and supply to analyze current economic issues	Measure 1: Standardized test to assess Principles of Microeconomics knowledge	Measure 1: The class average will be substantially above 50%. (The national average <50%).	Measure 1: In 2021-2022, the class average was 61% . In 2020-2021 the class average was 75% . The class averages well exceeded the threshold.	The trend starting with the oldest and going to this year is, 65.54%, 51.1%, 61.57%, 57.65%, 53%, 62%, 61%, 75%, so performance improved a lot in the last cycle.	Continue to monitor the progress of students. Consider having internship students take the assessment.	Review of key microeconomics concepts at the beginning of the senior capstone course paid off.
Learning Outcome 4 Use aggregate demand and supply to analyze current macroeconomic issues	Measure 1: Standardized test to assess Principles of Macroeconomics knowledge	Measure 1: The class average will be substantially above 50%. (The national average <50%).	Measure 1: In 2019-2020, the class average was 70% and in 2020-2021 the class average was 78% . The students well exceeded the threshold.	The trend is starting with the oldest and going through this year is 64.4%, 56.3%, 64.31%, 60.78% 54%, 65%, 70% and 78% so performance improved a lot in the last cycle.	Continue to monitor the progress of students. Consider having internship students take the assessment.	Review of key macroeconomics concepts at the beginning of the senior capstone course paid off.

Evidence of Learning: Courses within the Major 2021-2023						
<i>Measurable Learning Outcome</i>	<i>Method of Measurement</i>	<i>Target Performance</i>	<i>Actual Performance</i>	<i>Interpretation of Findings</i>	<i>Action Plan/Use of Results</i>	<i>Closing the Loop</i>
<i>Economics majors.</i>						
Learning Outcome 5: Identify costs and benefits of a global economy	Measure 1: Subset of international questions on the micro- and macroeconomics exam.	Measure 1: The class average will be substantially above the national average score.	Measure 1: The average was 71% in 2022-2023. (Data was not collected in 2021 due to ChiTester/Canvas Migration – aggregate scores available for LO3 and LO4 but not subset.)	The five-year trend is 67.6%, 70.6%, 62%, 87%, 71%. The trend is slightly positive.	Track this LO as student body changes with fewer international students. Look at performance on specific questions by UD course if feasible.	International focus of business school and department supporting this LO.

We updated the measures for LO1 and LO2 to a threshold (50%) instead of the previous comparison to a normalized national average. The 50% threshold is more stringent as the national average has consistently been below 50%. Some of our students do internships. We assess our internship students by (1) surveying their internship supervisor; and (2) reviewing a midterm report and final report submitted by internship. 100% of the nine economics students who completed an internship during the review period received excellent feedback from internship supervisors and high marks on the midterm and final reports. The department will consider having the internship students take the microeconomics and macroeconomics standardized assessments in the next review cycle.

Course: ECON 1010 Economics as a Social Science

Semester taught: Fall 2019, Spring 2020; assessed both semesters

Course:

Semester taught:

Sections included:

Outcome	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
<p>Gen ED SS Outcome 1: “Interactions between individuals and society” Students will describe how individuals and groups influence and are influenced by social contexts, institutions, physical environments and/or global process.</p>	<p>Measure 1: Scores on 11 open ended problems and 62 observations.</p>	<p>Measure 1: 70% of students will score 80% or higher</p>	<p>On average, 80% of students obtained 80% or above</p>	<p>The performance met threshold. There are a couple of topics that bring down overall performance, in particular, concepts in environmental economics. The trend is 76%, 68%, 80%.</p>	<p>Reinforce environmental topics in class and through more practice.</p>	
<p>Gen ED SS Outcome 2: “Application of concepts, theories, and methods”. Students will apply basic social science concepts, theories, and/or methods to a particular issue and identify factors that influence change.</p>	<p>Measure 1: Scores on 10 open ended questions 62 observations.</p>	<p>Measure 1: 70% of students will score 80% or higher.</p>	<p>On average, 81% of students obtained 80% or above.</p>	<p>The performance met threshold. Students struggle with models of comparative advantage. The trend is 72%, 68%, 81%.</p>	<p>Reinforce comparative advantage in class and through more practice.</p>	
<p>Gen ED SS Outcome 3: “Diverse Perspectives” Students will identify an argument about a social phenomenon and understand alternative explanations.</p>	<p>Measure 1: Scores on 6 open ended questions and 62 observations.</p>	<p>Measure 1: 70% of students will score 80% or higher</p>	<p>79% of students obtained 80% or above.</p>	<p>The performance met threshold. Students struggled with income inequality and designing a policy that maintains incentives for hard work. The trend is 77%, 73%, 79%.</p>	<p>Implement an extensive activity on income inequality.</p>	

Course: ECON 1010 Economics as a Social Science

Semester taught: Fall 2020, Spring 2021; assessed both semesters.

Outcome	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
Gen ED SS Outcome 1: “Interactions between individuals and society” Students will describe how individuals and groups influence and are influenced by social contexts, institutions, physical environments and/or global process.	Measure 1: Scores on 8 open ended problems and 107 observations.	Measure 1: 70% of students will score 80% or higher	On average, 71% of students obtained 80% or above	The performance met threshold. Students seem to struggle applying supply and demand model to address price controls and regulations in the market. They did better on environmental econ topics. The trend is 76%, 68%, 80%, 71%.	Reinforce supply and demand topics in class and through more practice.	The reinforcement of environmental topics helped in that area. This year it appears students struggled in a different area.
Gen ED SS Outcome 2: “Application of concepts, theories, and methods”. Students will apply basic social science concepts, theories, and/or methods to a particular issue and identify factors that influence change.	Measure 1: Scores on 8 open ended questions 107 observations.	Measure 1: 70% of students will score 80% or higher.	On average, 72% of students obtained 80% or above.	The performance met threshold. Students struggle with applications of supply and demand. The trend is 72%, 68%, 81%, 72%.	Reinforce supply and demand in class and through more practice.	The reinforcement of comparative advantage seemed to help. This year students struggled a different area.
Gen ED SS Outcome 3: “Diverse Perspectives” Students will identify an argument about a social phenomenon and understand alternative explanations.	Measure 1: Scores on 5 open ended questions and 107 observations.	Measure 1: 70% of students will score 80% or higher	72% of students obtained 80% or above.	The performance met threshold. The trend is 77%, 73%, 79%, 72%.		Students did better on income inequality but the overall performance on this learning outcome fell.

Students are continuing to perform above thresholds in ECON 1010 courses. We have a good mix of online and face-to-face students in the sample.

**Course: ECON 1100 Environmental Issues and Economic Policy
Taught and Assessed Fall 2021**

GE Learning Goal	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
GE LO1: Interactions between individuals and society. Measure question 1: opportunity costs.	Opportunity cost question.	70% of students will earn 80% or better on the measure.	82% of students earned above 80%.			
GE LO1: Interactions between individuals and society. Measure question 2: demand for water.	Demand for agricultural water question.	70% of students will earn 80% or better on the measure.	91% of students earned above 80%.	Students performing very successfully on this measure.		
GE LO2: Application of concepts, theories, and methods. Measure question 1: natural capital.	Natural capital depreciation question.	70% of students will earn 80% or better on the measure.	79% of students earned above 80%.			
GE LO2: Application of concepts, theories, and methods. Measure question 2:	Cap and trade question.	70% of students will earn 80% or better on the measure.	76% of students earned above 80%			

cap and trade.						
GE LO3: Diverse perspectives. Measure question 1: alternative to GDP/GNP.	Discussion of wellbeing measure other than GDP/GNP.	70% of students will earn 80% or better on the measure.	79% of students earned above 80%.			
GE LO3: Diverse perspectives. Measure question 2: government failure vs. market failure EVs.	Discussion of market failure versus government failure.	70% of students will earn 80% or better on the measure.	67% of students earned above 80%.	This is only measure where performance is below threshold.		

**Course: ECON 1100 Environmental Issues and Economic Policy
Taught and Assessed Fall 2022**

GE Learning Goal	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
GE LO1: Interactions between individuals and society. Measure question 1: opportunity costs.	Opportunity cost question.	70% of students will earn 80% or better on the measure.	83% of students earned above 80%.	Trend is 82%, 83% for first two semesters of assessment.		
GE LO1: Interactions between individuals and society. Measure question 2: demand for water.	Demand for agricultural water question.	70% of students will earn 80% or better on the measure.	93% of students earned above 80%.	Trend is 91%, 93%.		
GE LO2: Application of concepts, theories, and methods. Measure question 1: natural capital.	Natural capital depreciation question.	70% of students will earn 80% or better on the measure.	63% of students earned above 80%.	Trend is 79%, 63%. Didn't meet threshold in second semester. Large variation across the two semesters.	Continue to watch level and variation of this measure.	

GE LO2: Application of concepts, theories, and methods. Measure question 2: cap and trade.	Cap and trade question.	70% of students will earn 80% or better on the measure.	77% of students earned above 80%	Trend is 76%, 77%.		
GE LO3: Diverse perspectives. Measure question 1: alternative to GDP/GNP.	Discussion of wellbeing measure other than GDP/GNP.	70% of students will earn 80% or better on the measure.	73% of students earned above 80%.	Trend is 79%, 73%.		
GE LO3: Diverse perspectives. Measure question 2: government failure vs. market failure EVs.	Discussion of market failure versus government failure.	70% of students will earn 80% or better on the measure.	96% of students earned above 80%.	Trend is 67%, 96%. Wide variation on this measure as well.	Continue to watch level and variation of this measure.	

This is the first assessment cycle for which ECON 1100 performance was measured so it will be good to watch the trend and adjust as needed moving forward.

Course: ECON 1740 Economic History of the United States
Semester taught: Fall 2021, Spring 2022; assessed Fall semester.

GE Learning Goal	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
Students will have a reasonable understanding of the significant political, economic, and social changes in American history .	Measure 1: A weighted average of four essay questions and two multiple choice questions over two semesters.	60% of students will score 60% or above the essay questions or 60% will get the MC questions correct.	75% of students earned 60% or higher on the essay or answered the MC questions correctly.	After hitting a low last cycle, the scores rebounded to near the threshold this year. The trend in this area is 62.5%, 50% 59%, 47%, 59%, 75%. Numbers are trending up but may be pandemic effect.	Continue the use of MC questions and assess student learning again next year.	
Students will have a reasonable understanding of the major principles of American civilization, including the concepts of popular sovereignty, liberty, and equality.	Measure 1: A weighted average of four multiple choice questions.	60% of students will score 60% or above the essay questions or 60% will get the MC questions correct.	75% of students answered the questions correctly.	Students successfully demonstrated a reasonable understanding in this area. The trend in this area is 78%, 71%, and 75%, 77%, 69%, 75%.	No specific action necessary.	

<p>Students will have a reasonable understanding of the institutions and practices of the government provided for in the United States Constitution.</p>	<p>Measure 1: Score on five multiple choice questions.</p>	<p>60% of students will score 60% or above the essay questions or 60% will get the MC questions correct.</p>	<p>88% of students answered the question correctly.</p>	<p>Students met the threshold of reasonable understanding for this learning goal. The trend in this area is 60%, 68%, 70%, 80.8%, 80%, 88%.</p>	<p>No specific action plan necessary. Scores have been on an upward trend. Maybe consider higher threshold.</p>	
<p>Students will have a reasonable understanding of the basic workings and evolution of a market economy in the United States.</p>	<p>Measure 1: Weighted average of three essay and three multiple choice questions.</p>	<p>60% of students will score 60% or above the essay questions or 60% will get the MC questions correct.</p>	<p>66% of students scored 60% or above on the essay questions or answered the MC questions correctly.</p>	<p>Students surpassed the target threshold. The trend in this area is 62%, 61%, 65%, 58.24%, 65%, 66%.</p>	<p>Overall there is above threshold performance on this measure.</p>	

Course: ECON 1740 Economic History of the United States
Semester taught: Fall 2022, Spring 2023; assessed both semesters.

GE Learning Goal	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
Students will have a reasonable understanding of the significant political, economic, and social changes in American history .	Measure 1: A weighted average of four essay questions and two multiple choice questions over two semesters.	60% of students will score 60% or above the essay questions or 60% will get the MC questions correct.	64% of students earned 60% or higher on the essay or answered the MC questions correctly.	After hitting a low last cycle, the scores rebounded to near the threshold this year. The trend in this area is 62.5%, 50% 59%, 47%, 59%, 75%, 64%. Numbers are trending up but may be pandemic effect.		
Students will have a reasonable understanding of the major principles of American civilization, including the concepts of popular sovereignty, liberty, and equality.	Measure 1: A weighted average of four multiple choice questions.	60% of students will score 60% or above the essay questions or 60% will get the MC questions correct.	66% of students answered the questions correctly.	Students successfully demonstrated a reasonable understanding in this area. The trend in this area is 78%, 71%, and 75%, 77%, 69%, 75%, 66%.	Students are performing above threshold on this measure but it has trended down a bit in the most recent assessment periods so keep an eye on the trend.	

Students will have a reasonable understanding of the institutions and practices of the government provided for in the United States Constitution.	Measure 1: Score on five multiple choice questions.	60% of students will score 60% or above the essay questions or 60% will get the MC questions correct.	80% of students answered the question correctly.	Students met the threshold of reasonable understanding for this learning goal. The trend in this area is 60%, 68%, 70%, 80.8%, 80%, 88%, 80%.		
Students will have a reasonable understanding of the basic workings and evolution of a market economy in the United States.	Measure 1: Weighted average of three essay and three multiple choice questions.	60% of students will score 60% or above the essay questions or 60% will get the MC questions correct.	65% of students scored 60% or above on the essay questions or answered the MC questions correctly.	Students surpassed the target threshold. The trend in this area is 62%, 61%, 65%, 58.24%, 65%, 66%, 65%.		

We are currently in hiring a new faculty member and hope that this faculty member will help with sections of ECON 1740. Full time faculty members teaching ECON 1740 should coordinate during the next cycle to see if we should revamp ECON 1740 assessment.

Course: ECON 2010 Principles of Microeconomics

Semester taught: Taught Fall 2021 and Spring 2022; assessed both semesters.

Outcome	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
<p>Gen ED SS Outcome 1: “Interactions between individuals and society” Students will describe how individuals and groups influence and are influenced by social contexts, institutions, physical environments and/or global process.</p>	A set of three multiple choice questions over two instructors, n = 444 person-by-question observations	Measure 1: 70% of students will correctly answer the questions.	Overall 86% of the questions were answered correctly.	The trend is 81%, 84%, 87%, 89%, 88%, 86%. Students continue to demonstrate competence	No specific action is necessary	
<p>Gen ED SS Outcome 2: “Application of concepts, theories, and methods”. Students will apply basic social science concepts, theories, and/or methods to a particular issue and identify factors that influence change.</p>	A set of three multiple choice questions over two instructors, and three sections, n = 444 person-by-question observations	Measure 1: 70% of students will correctly answer the questions.	Overall 81% of the questions were answered correctly.	The trend is 93%, 66%, 71%, 73%, 75%, 81%. The numbers continue to trend upward.		Additional homework problems and applications in this area seems to have increased the scores some compared to last reporting cycle. (This trend has cont for two cycles)
<p>Gen ED SS Outcome 3: “Diverse Perspectives” Students will identify an argument about a social phenomenon and understand alternative explanations.</p>	A set of three multiple choice questions over two instructors and three sections, n = 444 person-by-question observations.	Measure 1: 70% of students will correctly answer the questions.	Overall 71% of the questions were answered correctly	The trend is 93%, 87%, 87%, 84%, 82%, 71%. Drop this cycle.	Moniter situation, are gains above coming at cost here?	

Course: ECON 2010 Principles of Microeconomics

Semester taught: Taught Fall 2022 and Spring 2023; assessed both semesters.

Outcome	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
<p>Gen ED SS Outcome 1: “Interactions between individuals and society” Students will describe how individuals and groups influence and are influenced by social contexts, institutions, physical environments and/or global process.</p>	<p>A set of three multiple choice questions over two instructors, n = 444 person-by-question observations</p>	<p>Measure 1: 70% of students will correctly answer the questions.</p>	<p>Overall 85% of the questions were answered correctly.</p>	<p>The trend is 81%, 84%, 87%, 89%, 88%, 86%, 85%. Very consistent above-threshold outcomes here.</p>	<p>No specific action is necessary</p>	
<p>Gen ED SS Outcome 2: “Application of concepts, theories, and methods”. Students will apply basic social science concepts, theories, and/or methods to a particular issue and identify factors that influence change.</p>	<p>A set of three multiple choice questions over two instructors, and three sections, n = 444 person-by-question observations</p>	<p>Measure 1: 70% of students will correctly answer the questions.</p>	<p>Overall 86% of the questions were answered correctly.</p>	<p>The trend is 93%, 66%, 71%, 73%, 75%, 81%, 86%. The numbers continue to trend upward.</p>		<p>Additional homework problems and applications in this area seems to have increased the scores some compared to last reporting cycle. (This trend has continued for two cycles)</p>
<p>Gen ED SS Outcome 3: “Diverse Perspectives” Students will identify an argument about a social phenomenon and understand alternative explanations.</p>	<p>A set of three multiple choice questions over two instructors and three sections, n = 444 person-by-question observations.</p>	<p>Measure 1: 70% of students will correctly answer the questions.</p>	<p>Overall 71% of the questions were answered correctly</p>	<p>The trend is 93%, 87%, 87%, 84%, 82%, 71%, 81%. 71% from 21-22 maybe outlier? Discuss with instructors.</p>		

Course: ECON 2020 Principles of Macroeconomics

Semester taught: Taught Fall 2021, Spring 2022, assessed both semesters

Outcome	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
Gen ED SS Outcome 1: “Interactions between individuals and society” Students will describe how individuals and groups influence and are influenced by social contexts, institutions, physical environments and/or global process.	Measure 1: A set of 2 multiple choice questions over 2 instructors, n = 486	Measure 1: 70% of students will correctly answer the questions.	On average, 83% of students answered correctly	Performance on this learning outcome continues to be strong. The trend is 68%, 88%, 85%, 87%, 83%.	Consistent high performance in recent years.	
Gen ED SS Outcome 2: “Application of concepts, theories, and methods”. Students will apply basic social science concepts, theories, and/or methods to a particular issue and identify factors that influence change.	Measure 1: A set of 2 multiple choice questions over 2 instructors, n = 484	Measure 1: 70% of students will correctly answer the questions.	On average, 77% of students answered correctly.	The trend on this learning outcome is 79%, 61%, 61%, 84%, 76%, 77%.	Consistent high performance in last three academic years.	
Gen ED SS Outcome 3: “Diverse Perspectives” Students will identify an argument about a social phenomenon and understand alternative explanations.	Measure 1: A set of 2 multiple choice questions over 2 instructors, n = 488	Measure 1: 70% of students will correctly answer the questions.	On average, 89% of students answered correctly.	Scores in this area reached a high. The trend is 71%, 68%, 72%, 86%, 89%.	Highest performance two cycles in a row!	

Course: ECON 2020 Principles of Macroeconomics
Semester taught: Taught Fall 2022, Spring 2023, assessed both semesters

Outcome	Method of Measurement	Target Performance	Actual Performance	Interpretation of Findings	Action Plan/Use of Results	Closing the Loop
Gen ED SS Outcome 1: “Interactions between individuals and society” Students will describe how individuals and groups influence and are influenced by social contexts, institutions, physical environments and/or global process.	Measure 1: A set of 2 multiple choice questions over 2 instructors, n = 486	Measure 1: 70% of students will correctly answer the questions.	On average, 83% of students answered correctly	Performance on this learning outcome continues to be strong. The trend is 68%, 88%, 85%, 87%, 83%, 84%.	Consistent high performance in recent years.	
Gen ED SS Outcome 2: “Application of concepts, theories, and methods”. Students will apply basic social science concepts, theories, and/or methods to a particular issue and identify factors that influence change.	Measure 1: A set of 2 multiple choice questions over 2 instructors, n = 484	Measure 1: 70% of students will correctly answer the questions.	On average, 77% of students answered correctly.	The trend on this learning outcome is 79%, 61%, 61%, 84%, 76%, 77%, 77%.	Very consistent high performance in recent academic years.	Bounced back from dip in performance a few years ago to achieve high performance. New chair should discuss with faculty.
Gen ED SS Outcome 3: “Diverse Perspectives” Students will identify an argument about a social phenomenon and understand alternative explanations.	Measure 1: A set of 2 multiple choice questions over 2 instructors, n = 488	Measure 1: 70% of students will correctly answer the questions.	On average, 89% of students answered correctly.	Scores in this area reached a high. The trend is 71%, 68%, 72%, 86%, 89%, 84%.	Consistently high performance.	

Appendix A

Most departments or programs receive a number of recommendations from their Five/Seven-Year Program Review processes. This page provides a means of updating progress towards the recommendations the department/program is enacting.

Date of Program Review: Feb. 2018	Recommendation	Progress Description
Recommendation 1	The team recommends that the department articulate and formalize a longer-term strategic plan to support its mission. The Department has begun this process and had met on this in the most recent semester. The strategic plan should have a set of long-term goals supported by objectives and actions to meet those objectives. The self-study document lists a set of objectives to support the vision. A clear set of actions to meet those objectives would go a long way to completing the strategic plan.	The university supports departments in their strategic planning. We created a new mission and vision statement in 2018. The chair works with the department, college, and university administration to update the plan every year. We think we have a strong long-term strategic plan that plays well to the strengths of the department.
Recommendation 2	How will the growing number of students likely to take the Economics Internship option be assessed?	We plan to have the internship students take the same assessment exams as research methods students in the upcoming assessment cycle.
Recommendation 3	The College has three very new academic advisors. It is the Department's responsibility to make certain that advisors thoroughly understand what careers and job opportunities are available to students of economics and what educational route will help students reach their goals	The lead advisor in GSBE has now been here since 2018 and we have good communication with advising. The chair has a regular meeting with advising and meets with them as issues come up. The chair also participated in a recent advisors search and always meets with new advisors when they start.
Recommendation 4	The team was quite satisfied with the energy and engagement of the faculty and their commitment to excellence. The only potential concern is the increase in course	Our enrollments have declined overall since we have far fewer SHNU 2+2 students nowadays. We don't expect that to grow much again, but do expect some students. On the

	offerings and programs given the number of majors and students. More offerings are likely to drop upper level course enrollments unless the number of students and majors continue to increase. While enrollments have shown a general overall increasing trend, the Department's reliance on the potentially volatile 2+2 program may be problematic, particularly if the university moves to such a model.	other hand, we've seen steady and sustained growth in matriculated students from other populations into our programs. (See charts in Appendix E.) The total number of upper division economics electives has not increased significantly. We try to manage schedules and delivery methods to get ample enrollment in those courses.
Recommendation 5	The team understands the importance of being included in the College's strategic plan. Although the Department appears to be valued by the College, paradoxically, exclusion from the list of "priority" departments in the strategic plan sends a conflicting message. The Department has an engaged faculty that would likely respond admirably to inclusion in this document. Revisiting the strategic plan of the College and allowing all departments to showcase their strengths and contributions would likely go a long way toward creating a stronger team spirit among departments.	The new strategic plan does not include "priority programs." Strategic planning has become more inclusive of all programs in the college since our last review and the economics department contributes to strategic planning at the college level in many ways including aligning strategic plans across the department, college, and university.
Recommendation 6	The Department boasts a large number of graduates going on to graduate school. However, a significant percentage will not. It might be helpful to begin aligning the Department with corporate partners. One way to do this is through the development of an Executive Advisory Council.	We formed an Economics Advisory Board and had our first meeting in Fall 2019. We've recruited new members for the last two meetings. In Fall 2022, we had students join us for the meeting for the first time and we continued that in Fall 2023. The advisory board helped us create case studies that inform our curriculum at the Fall 2022 meeting and helped us with a SWOT analysis at the Fall 2023 meeting.
Recommendation 7	The \$80 fee has been mentioned as a	There is no longer an \$80 fee so that part is resolved. We've seen declining enrollments in

	<p>possible source of the College's decline in enrollment relative to the University, which likely impacted Economics majors as well. The Department should conduct a study on the impact of the fee on the College's and Department's enrollments and revenues. If the fee is the source of decline, the College might consider (a) lowering the fee or (b) making certain that students understand the benefits that accrue to them as a result of the fee. The latter might involve a fairly significant internal marketing campaign. Elimination of calculus for many programs in the College will directly and indirectly impact the Department and enrollment in economics majors. Perhaps the Department and College can agree to <i>a form of Business Math that is inclusive of the needs of all departments.</i></p>	<p>our courses as a result of some department dropping Business Calculus (QUAN 2400). However, we've been able to adapt to that through fewer adjunct/overload sections.</p> <p>There is a new business algebra course in the mathematics department that is inclusive to the needs of most business students.</p> <p>Business Calculus continues to play an important role as it is required for many business majors, and many employers who recruit from the business school require one semester of calculus.</p>
<p>Recommendation 8</p>	<p>Include all matriculated students in ORSEE</p>	<p>Several faculty members work with the university on a regular basis to update enrollment in ORSEE to reach as many matriculated students as possible in this economics experiment recruiting system. We've reached out to the university about this on different occasions and there are regulatory/policy barriers to simply putting all matriculated students into the system.</p>

Appendix B

Please provide the following information about the full-time *and adjunct faculty* contracted by your department during the last academic year (summer through spring). Gathering this information each year will help with the headcount reporting that must be done for the final Five-Year Program Review document that is shared with the State Board of Regents.

Faculty Headcount	2019-20	2020-21	2021-22	2022-23
With Doctoral Degrees (Including MFA and other terminal degrees, as specified by the institution)				
Full-time Tenured	6	8	8	8
Full-time Non-Tenured (includes tenure-track)	6	4	5	6
Part-time and adjunct	1	1	1	0
With Master's Degrees				
Full-time Tenured				
Full-time Non-Tenured				
Part-time and adjunct	9	9	9	9
With Bachelor's Degrees				
Full-time Tenured				
Full-time Non-tenured				
Part-time and adjunct				
Other				
Full-time Tenured				
Full-time Non-tenured				
Part-time				
Total Headcount Faculty				
Full-time Tenured	6	8	8	8
Full-time Non-tenured	6	4	5	6
Part-time	9	9	9	9

Appendix C

Please respond to the following questions.

- 1) Looking back at your previous biennial report where you identified strategies for improvement, what progress has been made in implementing improvements?

We updated the threshold to a fixed threshold rather than a comparison to a national average in the microeconomics and macroeconomics assessments. Instructors in ECON 2010 and ECON 2020 worked together to revisit assessment. The questions are good but we wanted to make sure students are seeing them as similar times during the semester, etc. We will assess major learning outcomes in ECON 4860 Economics Internship, in the next cycle.

- 2) Please take a few minutes to review the new DFWI dashboard in the Report Gallery. This dashboard allows you to see the percentage of students in each course who earn a D+, D, D-, E, W, UW, or NC grade. The data can be filtered by several parameters. Reflect on the DFWI rates overall and of your underserved minority students versus your Caucasian students:

- a. What are you seeing?

Our DFWI rates vary from 8.8% in ECON 1010 to 36.9% in ECON 4010. ECON 4010 is among the higher rates at the university, but that might make sense as it is likely the most challenging class in a challenging major. Overall our DFWI rates are aligned with those across the university if the 0.0% DFWI aren't included to make an apples-to-apples comparison. I also think some data censored as a result of the 25 student minimum so that these numbers could be weird for upper division classes.

Caucasian students appear to do better on average but the number of Caucasian students is much larger. The table on the next page shows which DFWI rates are statistically significantly different at the 5% significance level. Interestingly, the significant differences occur in our non-major Gen Ed courses (ECON 1010 and ECON 1740), while Caucasians and other groups perform similarly in our business major economic courses (ECON 2010 and ECON 2020 – also Gen Ed courses).

- b. What concerns you?

The high DFWI rate in ECON 4010 concerns me but it is based on one semester of data during the pandemic so I don't trust it much. I'm also concerned about the difference in DFWI rates among different groups in the ECON 1010 and ECON 1740 course. I want to look at more variables to see if we can figure out what is driving those differences. I also worry about those comparisons a bit given the censored data above. Clearly only a small subset of courses is used in the comparison as there is a

minimum student count threshold and this probably leads to significant sample bias.

c. What additional data could be beneficial?

I think before asking for additional data, I'd like a lot more information on how the current data is collected and what assumptions are made when collecting and aggregating data. For example, the economics matriculation rate and graduation rate are negatively correlated over some time periods because students don't drop previous majors when they switch. How does something like that impact the calculation of Time to Baccalaureate Degree from 90-Credi Hour Mark, for example? I think issues like those are the main ones I'm concerned with in terms of availability of data for assessment.

	Asian	Hispanic	White	2+
ECON 1740		0.396	0.214	
ECON 2010	0.185	0.223	0.191	0.271
ECON 2020		0.176	0.201	0.265
ECON 1010		0.268	0.162	0.275
Pooled Prop		0.248067454		
Pooled Prop	0.19086883	0.194492625		0.19472534
Pooled Prop		0.198426471		0.2036312
Pooled Prop		0.176766169		0.16817486
p-value		3.13098E-05		
p-value	0.30962192	0.176620568		0.06485737
p-value		0.285571391		0.11663299
p-value		0.003183897		0.01172679

3) We have invited you to re-think your program assessment. What strategies are you considering? What support or help would you like?

One big strategy will be moving assessment into the internship course as our Business Economics majors grow. I'm also considering getting feedback from internship supervisors that might be used in future assessment reports. I will have faculty who teach the same courses seek more alignment during the next cycle, although they are mostly well-aligned already. I will also bring the differences across ethnicities to the attention of instructors of those classes.

The main support and help I would like is what I discussed related to how data is interpreted above. Things like limiting samples to only classes with more than 25 students makes sense but it also leads to sample bias. One example is all the courses in the list with 0.0% DFWI rates over many years. Maybe some of those are accurate but it doesn't seem possible that no one has withdrawn due to an emergency or something in all those courses in all that time.

It would be nice to have more information to assess the differences across ethnicities found above. I had to do quite a bit of work to get the p-values so maybe that type of analysis could be provided. I think it's important to check whether the observed differences are statistically significant as in our example only 5/12 observed differences were significant. If other student data was easily accessible like parent income then my guess is we'd find that a lot of these differences are related to other factors that are correlated with ethnicity. This doesn't mean the differences are okay, it would just help us figure out the best solutions.

Glossary

Student Learning Outcomes/Measurable Learning Outcomes

The terms ‘learning outcome’, ‘learning objective’, ‘learning competency’, and ‘learning goal’ are often used interchangeably. Broadly, these terms reference what we want students to be able to do AFTER they pass a course or graduate from a program. For this document, we will use the word ‘outcomes’. Good learning outcomes are specific (but not too specific), are observable, and are clear. Good learning outcomes focus on skills: knowledge and understanding; transferrable skills; habits of mind; career skills; attitudes and values.

- Should be developed using action words (if you can see it, you can assess it).
- Use compound statements judiciously.
- Use complex statements judiciously.

Curriculum Grid

A chart identifying the key learning outcomes addressed in each of the curriculum’s key elements or learning experiences (Suskie, 2019). A good curriculum:

- Gives students ample, diverse opportunities to achieve core learning outcomes.
- Has appropriate, progressive rigor.
- Concludes with an integrative, synthesizing capstone experience.
- Is focused and simple.
- Uses research-informed strategies to help students learn and succeed.
- Is consistent across venues and modalities.
- Is greater than the sum of its parts.

Target Performance (previously referred to as ‘Threshold’)

The level of performance at which students are doing well enough to succeed in later studies (e.g., next course in sequence or next level of course) or career.

Actual Performance

How students performed on the specific assessment. An average score is less meaningful than a distribution of scores (for example, 72% of students met or exceeded the target performance, 5% of students failed the assessment).

Closing the Loop

The process of following up on changes made to curriculum, pedagogy, materials, etc., to determine if the changes had the desired impact.

Continuous Improvement

An idea with roots in manufacturing, that promotes the ongoing effort to improve. Continuous improvement uses data and evidence to improve student learning and drive student success.

Direct evidence

Evidence based upon actual student work; performance on a test, a presentation, or a research paper, for example. Direct evidence is tangible, visible, and measurable.

Indirect evidence

Evidence that serves as a proxy for student learning. May include student opinion/perception of learning, course grades, measures of satisfaction, participation. Works well as a complement to direct evidence.

HIEE – High Impact Educational Experiences

Promote student learning through curricular and co-curricular activities that are intentionally designed to foster active and integrative student engagement by utilizing multiple impact strategies. Please see <https://weber.edu/weberthrives/HIEE.html>

Appendix D: Rubric for Empirical Research Paper – ECON 4980 – Research Methods

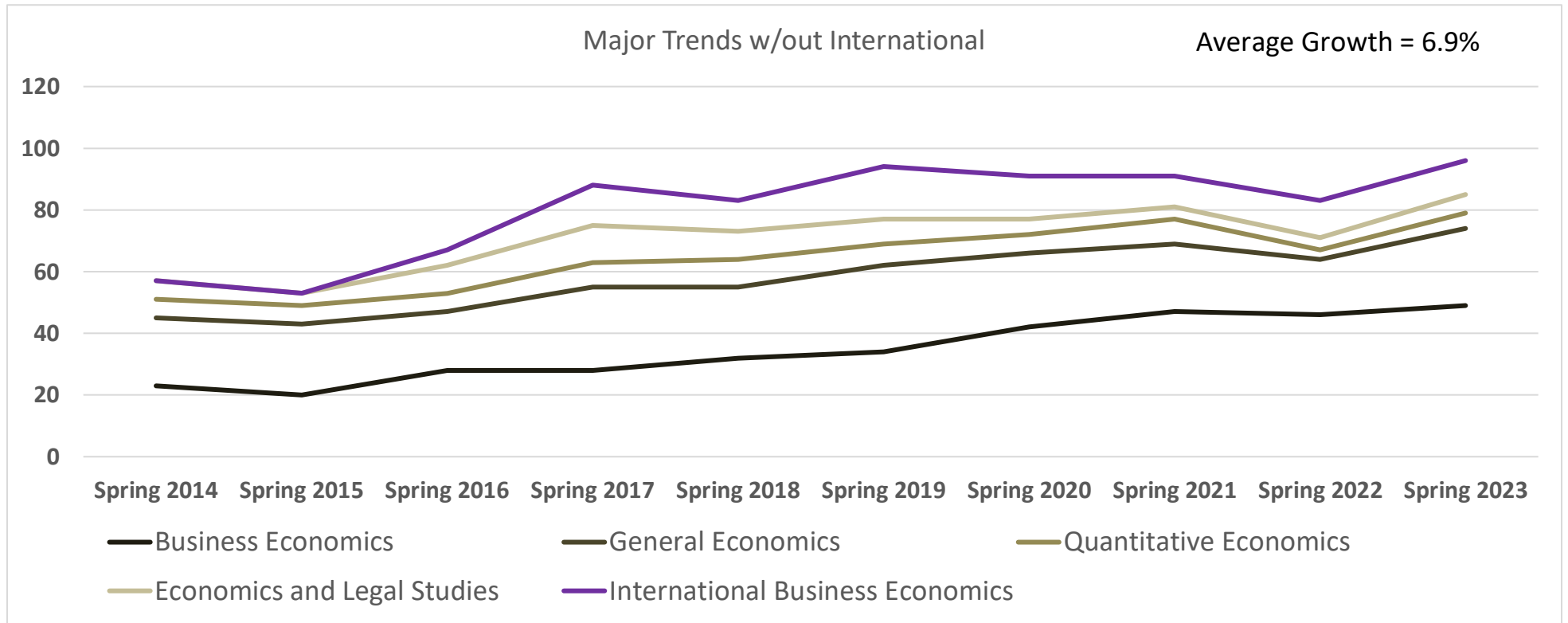
	Poor	Competent	Excellent
<p>Introduction. Motivating the thesis and providing the reader with a brief explanation of literature, methods, and results.</p> <p>The following items will be addressed:</p> <ol style="list-style-type: none"> 1. Articulate a thesis 2. Demonstrate the importance, relevance, and appropriateness of the argument for economic analysis. 3. The introduction should provide the reader an understanding of how you will make your argument, including methods used and a summary of findings as well as implications of the results. 	<ol style="list-style-type: none"> 1. No clear thesis 2. Minimal discussion of the relevance, interest, importance, or appropriateness for economic analysis. 3. Poor summary of research methods, findings, and implications of the results. 	<ol style="list-style-type: none"> 1. Clear, well-focused thesis 2. Some basic idea of why the question is interesting and why it is an appropriate topic for economic analysis. 3. Reasonable attempt to summarize research methods, findings, and implications of the results. 	<ol style="list-style-type: none"> 1. Clear, well-focused thesis 2. Convinces the reader of the economic importance of the issue. Clearly demonstrates the originality of the work and places it within the context of the existing literature. 3. Summarizes research methods and findings, and convinces the reader of the important implications of the findings.
<p>Literature Review. Collecting and evaluating extant research on the research topic, and presenting it in context with the thesis.</p> <p>The following items will be evaluated:</p> <ol style="list-style-type: none"> 1. Chooses appropriate literature to reference. 2. Recognizes and understands previous and relevant work in the area. 3. The literature review is written to educate the reader on the current state of knowledge and 	<ol style="list-style-type: none"> 1. Little or no reference to articles in academic journals. 2. References are not used as an integral part of the argument, or inappropriate references are used. 3. The reader is left hanging on terms of the current state of knowledge. 	<ol style="list-style-type: none"> 1. Some reference to articles in academic journals. 2. References are used to strengthen and focus the argument, and provide context for research methods chosen. 3. The reader has a good understanding of the current state of knowledge. 	<ol style="list-style-type: none"> 1. Numerous references are made to articles in academic journals and/or other original sources. 2. Effectively appeals to the literature at ALL stages of the argument. 3. The reader has an excellent understanding of the current state of knowledge AND understands holes or gaps in the literature and how the thesis addresses these holes or fills a gap.

	Poor	Competent	Excellent
how it relates to the research question.			
<p>Model and Methods. Using empirical evidence to answer a research question. Data can be thought of as any bit of evidence (e.g., historical, textual, national statistics, experimental results, computer-generated simulations, case analysis, surveys, etc.). These data (loosely defined) must be used to answer the research question in a convincing, appropriate way.</p> <p>Specifically, the student will be evaluated on the following:</p> <ol style="list-style-type: none"> 1. Uses literature to develop data methods. 2. Uses literature to develop methods of analysis that are rooted in testing a hypothesis 3. Formulates the null and alternative hypotheses 4. Carries out empirical analyses to test hypothesis and answer the research question. 5. **Bonus Area**: Demonstrates reflection on statistical process by determining robustness of results, either via narrative explanation or further statistical tests evaluating principal results. 	<ol style="list-style-type: none"> 1. Did not derive data methods from literature, or used data for only descriptive purposes. Fails to adhere to survey and experimental practices. 2. Did not derive methods of analysis from the literature. 3. Failed to present, or inaccurately presented, the null hypothesis and the alternative hypothesis. 4. No evidence is used to answer the research question, or only anecdotal evidence is used. 	<ol style="list-style-type: none"> 1. Derives data methods from the literature, and uses data to answer the research question. This may include creating a survey or an experiment in which the design follows recommendations in the literature, and follows standard survey and experimental practices. 2. Develops appropriate methods to analyze the data based on the literature. 3. Attempted to define the null and alternative hypotheses, but may have been incorrect or show room for improvement. 4. Carries out empirical/statistical analysis to test a hypothesis. As part of this process, makes explicit use of numerical estimates (mean, median, standard deviation), graphical analysis (scatter plots, line graphs, and box plots), or computer simulations where appropriate. 	<ol style="list-style-type: none"> 1. Derives data methods from the literature and uses data to answer the research question. Designs a unique survey or an experiment in which the design significantly follows recommendations in the literature, and follows standard survey and experimental practices. 2. Develops appropriate and sophisticated methods to analyze the data based on the literature. 3. Correctly defines the null and alternative hypotheses. 4. Carries out empirical/statistical analysis to test a hypothesis. As part of this process, makes explicit use of numerical estimates (mean, median, standard deviation), graphical analysis (scatter plots, line graphs, and box plots), or computer simulations where appropriate. 5. Demonstrates serious reflection on the process by investigating multiple alternative tests or model specifications in order to determine the robustness of the results (an attempt is made to evaluate the evaluation).
Data	<ol style="list-style-type: none"> 1. Data source not presented 2. Description of variables is unclear 3. Statistics are not accurate or described incorrectly. 	<ol style="list-style-type: none"> 1. Data sources is presented and described. 2. Key variables of interest are included in the description. 	<ol style="list-style-type: none"> 1. Data source is presented and described in detail. 2. Key variables of interest are describe precisely. Other control variables are appropriately mentioned.

	Poor	Competent	Excellent
	<p>4. Sample selection has no relation to the main question of the paper.</p>	<p>3. Statistics are accurately described.</p> <p>4. Sample selection makes sense in the context of the main question.</p>	<p>3. Statistics are accurately described and their relationship to the main question is presented.</p> <p>4. Sample selection is strongly related to the main question of the paper and the links are described to the reader.</p>
<p>Empirical Results Specifically, the following should be addressed:</p> <ol style="list-style-type: none"> 1. Professionally presents results in a table following examples from the literature. 2. Evaluates results in the context of the null/alternative hypotheses. 3. Explains the economic meaning of statistically significant findings and/or the statistical findings of the focus variable(s). Addresses limitations. 	<ol style="list-style-type: none"> 5. The results are not presented in a table or orderly fashion. 6. Fails to use the results to evaluate the hypothesis(es). 7. Does not clearly explain the economic meaning of statistically significant findings and/or the statistical findings of the focus variable. 	<ol style="list-style-type: none"> 5. The results are professionally presented in a table with clear descriptions of table titles, headers, and footnotes. Includes parameter estimates for slopes and intercepts, but may fails to provide a measure of statistical significance (t-statistic, standard errors, p-values) of each regressor. Does not include a measure of overall model performance. 6. Uses the results to evaluate the hypothesis(es). 7. Explains the signs and magnitude of parameter estimates and reflects on the economic meaning of statistically significant findings and/or the statistical findings of the focus variable. Minimally attempts to discuss limitations and shortcomings of results. 	<ol style="list-style-type: none"> 5. The results are professionally presented in a table with clear descriptions of table titles, headers, and footnotes. Includes parameter estimates for slopes and intercepts as well as measures of statistical significance of each regressor (t-statistic, standard errors, p-values). Includes measures of overall model performance. 6. Uses the results to evaluate the hypothesis(es). 7. Explains the signs and magnitude of parameter estimates and seriously reflects on the economic meaning of statistically significant findings and/or the statistical findings of the focus variable. Addresses limitations of the results. Explains the limitations of results by considering assumptions. Addresses any shortcomings of the results as they relate to economic reasoning. Places the results in the context of the current literature.
<p>Discussion/conclusions. Includes the following:</p> <ol style="list-style-type: none"> 1. The understanding of one's results and reflection on the implications thereof. 2. Conclusion is connected to the question and makes connections on how the results inform economic thinking 	<ol style="list-style-type: none"> 1. A vague and/or ambiguous summary of the conclusion as it relates to the research hypothesis. 2. This conclusion has a weak connection to the question and connections with economic thinking 3. Does not address shortcomings/limitations or areas for future research 	<ol style="list-style-type: none"> 1. A well-stated summary of the conclusion as it relates to the research hypothesis. 2. The conclusion is explicitly and strongly connected to the question, data, and methods of analysis. Draws connections with economic thinking. 3. Some reflection on the implications of the results 	<ol style="list-style-type: none"> 1. A well-stated summary the conclusion as it relates to the research hypothesis 2. The conclusion is strongly connected with the question, data, and methods of analysis. Draws connections with economic reasoning. 3. Thought-provoking reflection upon the implications of the conclusion with interesting new questions to be explored. Clearly understands the relationship between the paper's conclusions and previous work. Places results into the

	Poor	Competent	Excellent
3. Reflection: Identifies limitations and addresses areas for future research. Places findings in context of broader literature.		and possible unexplored issues.	broader context of the literature or policy-making process.
Overall quality of writing. The overall quality of the paper's organization, style, and grammar.	Poorly organized; the purpose and hypothesis is difficult to follow. Fails to maintain focus throughout the paper. Unacceptable grammar, spelling and punctuation.	Clear organization; the purpose and hypothesis is easy to follow. Good job maintaining focus throughout and staying on task in answering the research question Acceptable grammar, spelling and punctuation.	Well-organized and easy to follow. The purpose and hypothesis are easy to follow. 'The whole is greater than the sum of the parts.'

Appendix E: Major trends



Note that the vast majority of International Economics majors are/were SHNU 2+2 students, while students in our other majors primarily come from other populations. The chart above shows healthy and sustained growth with the non-international programs while the chart below shows the impact of the smaller 2+2 program.

