



April 28, 2019

TO: Rick Muma, Provost
Kay Monk-Morgan, Assistant Vice-President for Academic Affairs

From: Anand S. Desai, Dean, W. Frank Barton School of Business *Anand S. Desai*

Cc: Jen-Chi Cheng, Chair, Department of Economics

RE: Bachelor of Business Administration (Economics) Program Review

The BBA degree program with a major in Economics provides its students with the skills necessary for sound economic analysis to business and societal issues. The department also provides general education courses for all WSU students, a minor for students in other colleges, and core courses for all business undergraduate majors. It's contributions to the undergraduate students at WSU is affirmed by the fact that 86% of its SCH come from non-majors.

The department's tenure-stream faculty remain consistently active in producing intellectual contributions, producing 25 refereed journal articles two non-referred journal articles, two conference proceedings and five conference presentations. While the department is likely to face two to three retirements in the next 4 years, the faculty hired (and to be hired) through the newly created Institute for the Study of Economic Growth will offset some of the vacancies created through retirement, although some replacement hiring will be essential to carry out the department's mission. The faculty are engaged in providing service to both the Barton School and the university.

The department attracts high achieving students to its programs as measured by the ACT scores, which are 2 to 3 points higher than the university average. Of the 98 majors for the years reviewed, one received the Harry Gore Memorial Scholarship, three were DSI finalists, two were Clay Barton Scholars, and one was a Jabara Scholar. In the last review, the department was asked to align recruitment and retention efforts with the University's SEM plan. The department's faculty are actively engaged in undergraduate recruiting through a variety of activities including participation in on-campus events such as campus visits, Junior Days, Black & Yellow Days, DSI competitions, and major/minor fairs. actively participate in events geared toward high school students and hosted by Admissions and in Kansas Council of Economic Education (KCEE). One of our faculty members participates in orientation. The

department offers tutoring services to undergraduates, encourages students to major in economics, and provides academic advising to majors in an effort to retain students.

The number of majors has increased from 99 in Fall 2013 to 131 in Fall 2016; Number of graduates have increased from 14 in 2013 to 24 in 2017. Placement of graduates is also robust, with an average of 73% of the graduates over the four years reported being employed in the state and an average of 79% employed in the field of study.

The assessment process is robust and mature. Assessment of principal learning outcomes indicates three of the five learning outcomes have met the goals. The department has action plans to address two of the learning goals that did not meet the target (in one case, the performance was 3% short of the 80% goal). These two goals were the same ones that did not meet the target in the last review cycle. More attention needs to be paid to these two goals.

The degree program continues to be fully accredited by AACSB and the next AACSB Continuous Improvement Review will take place in spring 2023.



April 28, 2019

TO: Rick Muma, Provost
Kay Monk-Morgan, Assistant Vice-President for Academic Affairs

From: Anand S. Desai, Dean, W. Frank Barton School of Business *Anand S. Desai*

Cc: Jen-Chi Cheng, Chair, Department of Economics

RE: **Master of Arts (Economics) Program Review**

The MA-ECON degree program provides its students with analytical and quantitative tools for applied economic research and a broader understanding of the overall economic environment. Students in this program can choose one of three concentrations (12 credit hours each) of a 'general' concentration (also 12 credit hours). Since the last review, the degree program reduced the required credit hours from 33 to 30, introduced a new Data Analytics concentration, and eliminated the thesis option (all students do a research project as part of the applied learning component).

The department's tenure-stream faculty remain consistently active in producing intellectual contributions, producing 25 refereed journal articles two non-referred journal articles, two conference proceedings and five conference presentations. Dr. William Miles was recognized for his scholarly work and was awarded the H. Russell Bomhoff Endowed Professorship in fall 2018. While the department is likely to face two to three retirements in the next 4 years, the faculty hired (and to be hired) through the newly created Institute for the Study of Economic Growth will offset some of the vacancies created through retirement, although some replacement hiring will be essential to carry out the department's mission. The faculty are engaged in providing service to both the Barton School and the university.

The GPA's of students entering this degree program is comparable to the University Average for the most part. Placement of graduates remains high, with an average of 93% employed in the state and, with the exception of 2016-2017, 75% of the graduates being employed in their field of study. The data are based on relatively small samples as placement data on international students who return to their home countries is difficult to track.

Enrollment in the program, using fall census day numbers, has declined from 26 in 2016 to 17 in 2018. The recent addition of the data analytics concentration should help enrollment. Availability of graduate assistantships, (which are funded solely by the Barton School) is critical to attracting more graduate students. The newly created Institute for the Study of Economic Growth can help provide additional assistantships to attract more students.

The assessment process is robust and mature. Assessment of principal learning outcomes indicates all learning outcomes have met or exceeded the target goals. An outcome that failed to achieve its target level in prior years, achieved the target after an appropriate course intervention was introduced.

The degree program continues to be fully accredited by AACSB and the next AACSB Continuous Improvement Review will take place in spring 2023.



Academic unit: Economics _____ College: Barton School of Business

Date of last review 2016-2017 Date of last accreditation report (if relevant) _____

Triggered Programs NONE (2018)

List all degrees described in this report (add lines as necessary)

Degree: Bachelors - Economics CIP* code: 45.0601

Degree: Masters - Economics CIP code: 45.0601

Degree: _____ CIP code: _____

*To look up, go to: Classification of Instructional Programs Website, <http://nces.ed.gov/ipeds/cipcode/Default.aspx?v=55>

Certificate (s): _____

Faculty of the academic unit (add lines as necessary)

NAME	SIGNATURE	TENURE OR NON-TENURE TRACK
Jenchi Cheng		Tenure
Philip Hersch		Tenure
Martin Perline		Tenure
William Miles		Tenure
Jodi Pelkowski		Tenure
James Clark		Tenure
Ted Bolema		Tenure
DaEun Jung		Tenure
Janet Wolcutt		Non
Terence Decker		Non
Patricia Bradley		Non

Submitted by: Jenchi Cheng, Chair Date 3/27/2019
(Name and title) (Date)

In yellow highlighted areas, data will be provided

Part 1: Impact of Previous Self-Study Recommendations

At the conclusion of the last program self-study performed, the committee provided recommendations for improvement for the department. Please list those recommendations and note your progress to date on implementation.

Recommendation	Activity	Outcome
Consider incorporating the newly approved UNISCOPE model into the department's assessment of scholarship	The Economics Department assesses scholarship using the criteria set forth by the Business School. Recently, the School incorporated UNISCOPE into T&P decisions.	Ongoing
For the next review, align recruitment and retention efforts with the university's strategic enrollment plan.	See Part 8: Undergraduate Enrollment Management and Graduate Enrollment Management	Ongoing
Incorporate mission narrative explanation into the mission statement.	We believe there was some confusion over the mission statement. The specific roles of the undergraduate and MA program were listed under the mission making them appear as if they were part of the mission statement. These roles have now been moved to Part 2(b)	Clarified

Part 2: Departmental Purpose and Relationship to the University Mission

The mission of Wichita State University is to be an essential educational, cultural, and economic driver for Kansas and the greater public good.

Please list the program mission (if more than one program, list each mission), define the role of the program and tie them to the overall mission of Wichita State University printed above. (Explain in 1-2 concise paragraphs)

- a. Program Mission (if more than one program, list each mission):

The mission of the Department of Economics at Wichita State University consists of three interrelated components: To provide high quality instruction at both the undergraduate and master's level; to conduct and disseminate economic research; and to provide service within the university, the profession and the wider community.

- b. The role of the program (s) and relationship to the University mission:

As part of the traditional core of the social sciences, economics is one of the fundamental disciplines that constitute a comprehensive liberal arts education. In addition, economics has always been at the core of academic business education. An essential part of a university being an economic driver is to provide economic literacy and to equip students with the tools to make sound economic decisions.

Role of Undergraduate Program:

to provide sound undergraduate training in economic thinking and analysis to those students who:

- study economics as part of their undergraduate business program;
- study economics as part of their undergraduate degree programs in other colleges within WSU;
- minor in economics as part of their undergraduate program in any college within WSU;
- major in economics at WSU, either as undergraduate students in the Barton School of Business or in the Fairmount College of Liberal Arts and Sciences;

Role of Master's Program:

to provide students with:

- analytical and quantitative tools in applied economic research;
- a broader understanding of the overall economic environment.

The faculty of the Economics Department also support the missions of the university by providing their expertise to projects and programs within the university, within the discipline of economics, in the business community, and in the larger public community in the Wichita area and across the state of Kansas. Our faculty members provide their expertise through commentary on current economic issues in print and broadcast media. One of our faculty consulted with the Kansas Judicial Administration through WSU Contracts to produce updated Kansas Child Expenditures Schedules to be used in determining child support values in the state of Kansas. One faculty member contributes to printed and online study guide/tools used in conjunction with principles of economics textbooks. Another faculty member works with several law firms to provide research and testimony on various practical issues. In keeping with the goals of the university, the economics faculty is engaged in continuing scholarship that has resulted in publications in both economic and interdisciplinary journals.

c. Has the mission of the Program (s) changed since last review? Yes No

i. If yes, describe in 1-2 concise paragraphs. If no, is there a need to change?

We do not perceive a need to change the mission of the Department's program.

d. Provide an overall description of your program (s) including a list of the measurable goals and objectives of the program (s) (programmatic). Have they changed since the last review? Yes No

If yes, describe the changes in a concise manner.

The undergraduate major has not changed. The MA program was revamped. (Changes are denoted following the description of the new program).

Undergraduate Program:

An economics major in the Barton School requires a minimum of 21 upper-division hours in economics, and must include:

- Econ 301, Intermediate Macroeconomics (3 hours);
- Econ 302, Intermediate Microeconomics (3 hours);
- 15 credit hours of upper-division economics electives with at least 9 credit hours in economics, another 6 with advisor consent (15 hours).

A minor in economics in the Barton School requires Econ 201 and Econ 202, Principles of Macroeconomics and Principles of Microeconomics, plus nine hours of upper-division work in economics, with a minimum GPA of 2.25 in the economics classes a student has taken. Students in the Fairmount College of Liberal Arts and Sciences have similar requirements for a major or minor in economics.

The majority of the courses offered by the economics department are largely comprised of students taking the courses to meet Business School requirements. As provided in Table 16 from the Office of Planning & Analysis for SCH by student department affiliation on fall census day, over 86% of the SCH are taken by non-majors. Less than 8% of SCH were taken by undergraduate economics majors.

The Economics Department offers multiple sections each semester of four classes that serve the needs of business majors in the Barton School:

- Econ 201, Principles of Macroeconomics (3 hours);
- Econ 202, Principles of Microeconomics (3 hours).
- Econ 231, Introductory Business Statistics (3 hours);
- Econ 232, Statistical Software Applications for Business (1 hour);

The department also teaches multiple sections each year of several other courses that primarily serve the needs of business majors in the Barton School:

- Econ 340, Money and Banking (3 hours);
- Econ 672, International Economics and Business (3 hours);
- Econ 674, International Finance (3 hours).

Both of the Principles courses, Econ 201 and 202, as well as Introductory Business Statistics and Statistical Software Applications for Business, Econ 231 and 232, are required of all Barton School business majors as part of the business core curriculum. Econ 340, Money and Banking, is required of all finance majors and finance minors in the Barton School. Econ 674, International Finance, is cross-listed as a finance course and is an elective for finance majors and minors. Econ 672 and 674, International Economics and Business and International Finance, are cross-listed as International Business (IB) courses and required of students majoring in IB during most of the semesters under review. Recently, the IB program made some changes with ECON672 being a required course but moving ECON674 to an elective for their majors. Econ 611, Economics of Sports, is an upper division elective class for sports administration majors in the College of Education as well as an upper division economics elective. The department offers two courses, Econ 400 and 401, Economics in the Classroom, Part I (3 hours) and Economics in the Classroom, Part II (3 hours), to serve the needs of

students in the College of Education planning to become social studies teachers.

Our program has a large interdisciplinary component as demonstrated by the number of cross-listings with other departments and the number of economics courses required by other majors and programs. We are also interdisciplinary in that we allow students to take upper division economics electives taught by faculty outside of the department. Three of the electives of the major, Econ 663, 709, and 765, Economic Insecurity, Urban Economics and Public Sector Economics, are cross-listings taught by faculty in the Public Administration program; Econ 570, International Political Economy is cross-listed and taught by a Political Science faculty member; and one course Econ 627, Economic History of the US, is cross-listed and taught by a History faculty member.

Program Objectives:

- a. To promote economic literacy.
- b. To increase the number of students that pursue economics as a major.
- c. To hire, retain and promote qualified faculty to teach undergraduate courses.

Learner Centered Objectives:

- a. To have students obtain an understanding of *standard microeconomics concepts and theories* to explain the behavior of individuals, businesses, and industries in market-based systems.
- b. To have students obtain an understanding of standard *macroeconomics concepts and theories* to explain the behavior of events in industrialized macro economies.

Master's Program:

The Master's Program was revamped with changes taking effect Fall 2018. The current program consists of an 18 credit-hour core and a choice of one of three concentrations or a no concentration option.

Core:

- Econ 722: Topic in Microeconomics (3)
- Econ 731: Applied Econometrics (3)
- Econ 801: Macroeconomic Analysis (3)
- Econ 803: Analysis of Business Conditions and Forecasting. (3)
- Econ 804: Managerial Economics (3)
- Econ 893: Research Project

These classes are commonly found in M.A. programs across the country and lay the foundation of the discipline. They are designed to give students skills in economic modeling and analysis.

Data Analytics Concentration (12 hours)

This concentration provides a natural fit by combining the core's tools of economic analysis with related fields such as Management Information Systems and Decision Sciences. Students choose 3 classes from the following menu:

- MIS 600 (or 884): Database Management Systems (Database Planning and Management)
- DS 675 or (875): Spreadsheet Modeling in Business
- MIS 750: Business Intelligence and Analytics
- MGMT (or MKT 803): Business Decision Making and Analysis (Marketing Analysis)

plus

One elective course in economics, statistics, business or engineering. (Note: This concentration is stackable for students who have completed the certificate in business analytics).

Financial Economics Concentration (12 hours)

This concentration is geared towards students seeking careers in the financial sector. Beyond the core, students are required to take the MBA core course, Fin 850: Managerial Finance. Three additional are chosen from either finance or an economics related subject. (Note: this concentration is stackable with students who complete the proposed Barton School finance certificate. They would only be required to complete the core to obtain the M.A. degree).

International Economics Concentration (12 hours)

The International Economics track is geared to those with an interest in the international economy, both from a business and policy perspective. The required courses are Econ 672: International Economics and Business, Econ 674: International Finance, and the seminar Econ 870: International Capital Markets. An elective class can be chosen from international-related courses offered by the Barton School or disciplines, such as a political science.

No concentration: (12 hours)

This option is particularly suitable for the generalist or students who wish to pursue a doctoral degree in economics or a related discipline. Beyond the core, students may take whatever classes in economics that interest them. Students interested in doctoral work are encouraged to take some of their elective hours outside of the department in either mathematics or statistics. Students interested in government work are encouraged to take electives from the Public Administration program.

Changes from prior program:

- i. Program hours were reduced from 33 to 30.
- ii. Thesis option was eliminated (all students now do a research project).
- iii. Data Analytics Concentration was created.
- iv. Econ 722 (Topic in Microeconomics) replaced Econ 702 (Math. Methods in Economics) in the core.

Program Objectives:

- a. To maintain a qualified faculty to teach graduate courses and supervise student research.
- b. To annually enroll 10 to 20 qualified students into the program.
- c. To have at least 80 percent of graduates obtain positions consistent with their goals (e.g., employment, further academic study).

Learner Centered Objectives

- a. To have students obtain an advanced understanding of standard macro and microeconomic models.
- b. To have students acquire the ability to perform empirical economic research.

Describe the quality of the program/certificate as assessed by the strengths, productivity, and qualifications of the faculty in terms of SCH, majors, graduates, and scholarly/creative activity (refer to instructions in the WSU Program Review document for more information on completing this section).

What standards, if any, are in place for your college/department for the following areas?

Departmental Standards																				
College/ Dpt.	Ref Journal Articles				Non Ref Journal Articles				Conference Proceedings				Presentations				Books			
	S	A	P	NA	S	A	P	NA	S	A	P	NA	S	A	P	NA	S	A	P	NA

S=Submitted, A=Accepted, P=Published, NA= Not Accepted

Departmental Standards										
College/ Dpt.	Performances			Number of Exhibits		Creative Work		No. Grants Submitted	No. Grants Awarded	\$ Grant Value
	*	**	***	Juried	****	Juried	Non-Juried			

* Winning by competitive audition. **Professional attainment (e.g., commercial recording). ***Principal role in a performance.

****Commissioned or included in a collection.

The Department does not have collective numerical standards. The Barton School sets standards for categorizing individual faculty for accreditation and teaching-load purposes. Economics Department faculty fall into two categories:

- 1) Scholarly Academic: In part, “over the previous five years, Scholarly Academics must publish a minimum of two (2) peer-reviewed journal articles in widely recognized academic journals relevant to the mission of the Barton School of Business.” (For full standards of Scholarly Academic see Appendix A).
- 2) Instructional Practitioners: Are not required to publish in refereed journals. (For full standards of Scholarly academic see Appendix A).

Please use the tables below to share information about your departmental scholarly outputs.

Departmental Outputs																				
College/ Dpt.	Ref Journal Articles				Non Ref Journal Articles				Conference Proceedings				Presentations				Books			
	S	A	P	NA	S	A	P	NA	S	A	P	NA	S	A	P	NA	S	A	P	NA
2014-2015	5	3	7	2					1	1	1		2	2	1					
2015-2016	7	6	4	0			2						2	2	1					
2016-2017	9	4	6	1					1	1	1		2	2	1					
2017-2018	7	7	8	0									3	3	2					

S=Submitted, A=Accepted, P=Published, NA= Not Accepted

Departmental Outputs										
College/ Dpt.	Performances			Number of Exhibits		Creative Work		No. Grants Submitted	No. Grants Awarded	\$ Grant Value
	*	**	** *	Juried	*** *	Juried	Non-Juried			
2014-2015										
2015-2016										
2016-2017										
2017-2018										

* Winning by competitive audition. **Professional attainment (e.g., commercial recording). ***Principal role in a performance.

****Commissioned or included in a collection.

Narrative:

Provide a brief assessment of the quality of the faculty/staff using the data from the table above and tables 1-7 from the Office of Planning Analysis as well as any additional relevant data. Programs should comment on details in regard to productivity of the faculty (i.e., some departments may have a few faculty producing the majority of the scholarship), efforts to recruit/retain faculty, departmental succession plans, course evaluation data, etc.

Provide assessment here:

The Department of Economics in AY 2018 consisted of seven faculty members with professorial rank: three full, three associate, and one untenured assistant professor. (One associate professor's primary responsibility was serving as associate dean of the Barton School. He resumed full-time faculty duties in AY 2019). The department also has two full-time lecturers, one who holds a PhD in economics, and the other is an ABD. Both recently were promoted to Teaching Professors through the university Non-Tenure Promotion review process. We have one lecturer whose employment is through the Center for Economic Development and Business Research as a Senior Research Economist and Associate Educator. She also went through the university Non-Tenure Promotion review process and was awarded Associate Teaching Professor status. All tenure-track faculty members hold doctorates from well-recognized economics program.

The composition of the faculty going forward is expected to change significantly in the next few years. On the minus side, the Department's current assistant professor has decided not to go up for tenure and will likely remain with the department for only one more year. Additionally, in the next 4 years, two to three faculty members are likely to retire. These reductions will, in part, be offset by the newly established Institute for the Study of Economic Growth. Its director, an economics PhD, has been

tenured within the Economics Department at the associate professor level and will be teaching one economics course per semester. The center is now in the process of hiring 2 to 3 tenure track positions. Most likely, two of them will be housed within economics. While their teaching loads have yet to be determined, it is anticipated that their primary teaching assignment will eventually be to offer sections of Fundamentals of Business course rather than courses to support our economics programs. As noted, in the previous program review, the Department has been understaffed relative to its peer institutions. It is unclear what the net effect of the above changes will have on Department staffing levels.

Faculty Scholarly Activity:

The faculty of the Department of Economics have been consistently active in research, and have been successful publishing in a wide array of good academic journals. Of the 6 full-time-track faculty members, 5 had multiple refereed journal publications. (Forty percent of all publications are attributable to one faculty member who also teaches two of the core classes in the MA program).

Faculty research papers continue to be heavily cited by other scholars. From CY2015 – CY 2018, the number of cites generated by faculty research exceeds 800. Faculty have also been asked to serve as reviewers for many quality journals.

Research Awards:

In the past, several faculty members have been awarded the Barton School Researcher of the Year Award. Most recently, Prof. William Miles received the award in 2016. (In 2011, Professor William Miles was the recipient of University's Excellence in Research Award). This past fall, Prof. Miles, was named as the holder of the H. Russell Bomhoff Endowed Professorship as recognition for his successful research record (53 journal articles) and excellent teaching.

Barton Fellowships are awarded to Barton School of Business faculty members "who have a consistent record of outstanding scholarship, instruction, and service to WSU." Both Prof. Miles and Prof. Hersch held 2 year Barton fellowships during the Program Review cycle period.

Teaching Productivity:

Credit hour Generation:

In FY 2015, total SCH generated by the Department (Table 1) was 7027. This dipped to 6614 in FY 2017 (the last year of data), a decline of 5.8%. Most of the decline occurred at the 200-course level (6.9%); upper division and graduate level saw a combined 3.4% decline. Virtually, the entire decline occurred between 2015 and 2016. There was only a 25 SCH drop (0.38%) between 2016 and 2017. The Department has begun to offer more on-line sections of 200-level classes and these are expected to increase overall SCH production.

As measured by the Fall 2016 November 1st Census Day (Table 5c) the Department generated 308.4 SCH per FTE. This was 42.6% higher than for the University as a whole. SCH per FTE for tenure eligible faculty was 240.5, which was 24.3% higher than for the University. These numbers are comparable with those from the last program review. Credit hours generated by non-tenure track faculty are primarily from faculty who have been awarded the rank senior or associate educator. No classes are taught by GTAs.

Teaching Awards:

A number of current Department faculty have been recognized for excellence in teaching:

Wichita State University Academy for Effective Teaching Award: Jen-Chi Cheng (2011), Martin Perline (1997), Jodi Pelkowski (2017).

Regents Award for Excellence in Teaching: Jen-Chi Cheng (2008), Jodi Pelkowski (2006), Janet Wolcutt (1986).

W. Frank Barton School of Business Instructor of the Year: Jen-Chi Cheng (1998, 2008,), Janet Wolcutt (1985, 1999, 2018 Undergraduate), Martin Perline (1987), Jodi Pelkowski (2007, 2016 Graduate), Leah Barnhard (Adjunct, 2008), William Miles (2017 Graduate).

Bloomberg Foundation Faculty Fellow: Martin Perline (2004- 2017).

Part 4: Academic Program(s) and Emphases

Analyze the quality of the program as assessed by its curriculum and impact on students for each program (if more than one). Attach updated program assessment plan (s) as an appendix (refer to instructions in the WSU Program Review document for more information).

Narrative: a. For undergraduate programs, compare ACT scores of the majors with the University as a whole. (Evaluate table 8 [ACT data] from the Office of Planning and Analysis).

Provide assessment here:

As reported in Table 8, for 2015 and 2016 the average ACT score of our majors was slightly above 26 which is approximately 3 points higher than the university average. This has been a consistent trend of our majors with the exception of 2014 when the average score of majors was slightly lower at 25.4, approximately 2 points higher than the university average.

Narrative: b. For graduate programs, compare graduate GPAs of the majors with University graduate GPAs. (Evaluate table 9 [GPA data] from the Office of Planning and Analysis)

Provide assessment here:

Reported GPAs for entering M.A. students have been comparable to the University as a whole. For the 2013-17 period the rolling 5-year average GPA for Economics students was 3.3 versus 3.5 for the university. With the exception of a dip in 2017 to 3.1, the average GPA of admitted econ MA students is comparable to that of the university for all graduate programs. Since GPA values are only reported for about 50% of all admitted students, a one year change may not be meaningful.

Narrative: c. Identify the principal learning outcomes (i.e., what skills does your Program expect students to graduate with). Provide aggregate data on how students are meeting those outcomes in the following table. Data should relate to the goals and objectives of the program as listed in 1e. Provide an analysis and evaluation of the data by learner outcome with proposed actions based on the results.

In the following table provide program level information. You may add an appendix to provide more explanation/details.

For each learning outcome in the table students were judged as Exceeding Expectations, Meeting Expectations or Did Not Meet expectations. The criteria used are given in Appendix B.

Undergraduate Program:

Learning Outcomes	Assessment Tool	Target/Criteria	Results	Analysis
1. Students will describe consumer choice theory using indifference curves and budget constraints.	Econ 302 (Homework Questions and Exam 1 Questions)	80% Meet or Exceeds Expectations	73.8% (N=145)	Target not met. Action: Additional class time will be allocated to include more examples or applications of the theory and an announced quiz will be incorporated into the course to provide student feedback.
2. Students will define cost minimization using isocost and isoquant analysis.	Econ 302 (Homework Questions and Exam 2 Questions)	80% Meet or Exceeds Expectations	80.7% (N=145)	Target met. No action required.
3. Students will differentiate short-run and long-run implications of a change in market conditions in a perfectly competitive market.	Econ 302 (Homework Questions and Exam 3 Questions)	80% Meet or Exceeds Expectations	87.6% (N=145)	Target met. No action required.
4. Students will describe basic Keynesian IS-LM Aggregate Supply model.	Econ 301 (Exam Questions)	80% Meet or Exceeds Expectations	88.6% (N=114)	Target met. No action required.
5. Students will define the basic Solow growth model.	Econ 301 (Exam Questions)	80% Meet or Exceeds Expectations	77.4% (N=114)	Target not met. More class time will be devoted to the topic. Additional articles about the slowdown in long-term growth will be introduced.

Master's Program:

Learning Outcomes (most programs will have multiple outcomes)	Assessment Tool (e.g., portfolios, rubrics, exams)	Target/Criteria (desired program level achievement)	Results	Analysis
1. Students will conduct research using statistical tools.	Research Project (Econ 803)	80%	96% (N=40)	Target met. No action required
2. Students will be able to work through the standard model of the profit maximizing firm	Econ 804 (Exam 1)	80%	88.1% (N=46)	Target met. No action required
3. Students will be able to analytically differentiate between competitive and noncompetitive market structures.	Econ 804 (Exam 2)	80%	86.9% (N=46)	Target met. No action required
4. Students will be able to work basic game theory models.	Econ 804 (Exam 3)	80%	84.8% (N=46)	Overall target met. In AY17 only 60% met the criteria (N=10). For the following year, more in-class examples were used and problem set had additional questions. In AY18, all students achieved desired competency.
5. Students will be able to use optimization techniques as applied to economic models.	Econ 702 (Exam 1) Econ 702 (Exam 2)	80%	85.4% (N=41)	Target met. No action required

Learning Outcomes (most programs will have multiple outcomes)	Assessment Tool (e.g., portfolios, rubrics, exams)	Target/Criteria (desired program level achievement)	Results	Analysis
6. Students will be able to work through macroeconomic models under Classical, Keynesian, New Classical and New Keynesian assumptions and determine their policy implications	Econ 801 (Exam 2) Econ 801 (Exam 3)	80%	85.7% (N=49)	Target met. No action required
7. Students will be able to solve long-run macroeconomic growth models.	Econ 801 (Exam 1)	80%	84.3% (N=51)	Target met. (See Learning Outcome #8 below for analysis).
8. Students will demonstrate an understanding of long run growth theory and be able to apply what they have learned in interpreting the experience of a particular country.	Term Paper (Econ 801)	80%	100% (N=21)	This rubric was instituted in AY17. Students from prior assessment indicated students were having problems with the topic of growth, so a term paper on the topic was introduced It's introduction improved student outcomes in Learning Outcome #7

Definitions:

Assessment Tool: One or more tools to identify, collect, and prepare data to evaluate the achievement of learning outcomes (e.g., a writing project evaluated by a rubric).

Criterion/Target: Percentage of program students expected to achieve the desired outcome for demonstrating program effectiveness (e.g., 90% of the students will demonstrate satisfactory performance on a writing project).

Result: Actual achievement on each learning outcome measurement (e.g., 95%).

Analysis: Determines the extent to which learning outcomes are being achieved and leads to decisions and actions to improve the program. The analysis and evaluation should align with specific learning outcome and consider whether the measurement and/or criteria/target remain a valid indicator of the learning outcome as well as whether the learning outcomes need to be revised.

Narrative: Provide assessment here:

Undergraduate Program

Three of the five learning outcomes were met for the undergraduate program. For the two that did not meet our target goal, one was off the target by 7% and the other off just 3%. Consumer choice theory and economic growth models are generally difficult concepts for students to master. Additional class time and homework will be used to try to address the shortcoming of the consumer choice theory and economic growth models.

Master's Program

All current learning outcomes are currently being met. No action is warranted. Going forward, Learning Outcome #5 will now be assessed in Econ 722 which has replaced Econ 702 in the program's core.

Learner Outcomes (e.g., capstone, licensing/certification exam pass-rates) by year, for the last three years				
Year	N	Name of Exam	Program Result	National Comparison±
1		N/A		
2				
3				

Narrative: d. Provide aggregate data on student majors satisfaction (e.g., exit surveys), capstone results, licensing or certification examination results (if applicable), employer surveys or other such data that indicate student satisfaction with the program and whether students are learning the curriculum (for learner outcomes, data should relate to the outcomes of the program as listed in 3c). Evaluate table 10 from the Office of Planning and Analysis regarding student satisfaction data.

Provide assessment here:

Based on the University exit survey (Table 10), the number of undergraduate economics majors reporting they were satisfied or very satisfied exceeding the University average: 93.9% vs. 81.3% (unweighted average 2015-2017). For economics master's students the reported percentages are comparable to other University graduate programs: 90.8% vs. 84.4.

We don't have formal feedback from employer surveys, but the Department has an outside advisory board that includes some members from Wichita area employers (e.g., Spirit, Koch). They provide input into the curriculum and are supportive of the content presented. They are also complimentary of economics students who have graduated from our programs.

There are no licensing/certification exams in economics either at the graduate or undergraduate level.

Does your program support the university General Education program?

Yes No

If yes, please complete the table below and respond to the narrative prompt. If no, skip to the next.

Outcomes:		
<ul style="list-style-type: none"> • Have acquired knowledge in the arts, humanities, and natural and social sciences • Think critically and independently • Write and speak effectively • Employ analytical reasoning and problem solving techniques 	Results	
	Majors	Non-Majors

Note: Not all programs evaluate every goal/skill. Programs may choose to use assessment rubrics for this purpose. Sample forms available at: <http://www.aacu.org/value/rubrics/>

Narrative:

- e. Provide aggregate data on how the goals of the *WSU General Education Program* and *KBOR 2020 Foundation Skills* are assessed in undergraduate programs (optional for graduate programs).

Provide assessment here:

These goals are not assessed at the major level. However, these goals are assessed at the degree level in the Barton School for AACSB International (Association to Advance Collegiate Schools of Business)

Concurrent Enrollment - Does the program offer concurrent enrollment courses? Yes No

If no, skip to next question.

Narrative:

- f. For programs/departments with concurrent enrollment courses (per KBOR policy), provide the assessment of such courses over the last three years (disaggregated by each year) that assures grading standards (e.g., papers, portfolios, quizzes, labs, etc.) course management, instructional delivery, and content meet or exceed those in regular on-campus sections.

Provide assessment here:

N/A - We do not offer any concurrent courses.

Accreditation – Is the program accredited by a specialty accreditation body? Yes No

- g. If yes, please note the name of the body, the next review date and concerns from the last review.

Narrative:

Provide assessment here:

The Barton School of Business at Wichita State University is accredited by the Association to Advance Collegiate Schools of Business (AACSB), the top tier business accrediting agency. Both the undergraduate and master's programs are included in the Barton School's accreditation by AACSB. There is no separate accreditation of the Department's programs. The next review is 2023. No specific concerns were expressed regarding either program in the last review that was completed in 2018.

Credit hour determination – How does the department assign credit hours to courses?

- Narrative:** h. Provide the process the department uses to assure assignment of credit hours (per WSU policy 2.18) to all courses has been reviewed over the last three years.

Provide assessment here:

Economics classes are primarily 3 credit hours. The work load is consistent with what is expected of a traditional 15 week class that meets 3 hours per week. This is true for 8 week classes, pre-session and on-line offerings. Those courses have the same syllabus content as their 15 week counterparts. As part of their Faculty Annual Report (FAR), faculty members submit teaching information (e.g., syllabi). This material is reviewed by the Department's Executive Committee. New courses and substantial course changes must be approved by College committees and voted on by faculty.

Overall Assessment – Define the Overall quality of the academic program.

Provide assessment here:

Undergraduate Program:

The overall quality of the program is satisfactory. As reported in Table 8, the average ACT scores of our majors is approximately 3 points higher than the university average. The exit surveys indicate our majors are satisfied with the program. Our program is comparable to undergraduate economics programs at other academic institutions. We continue to attract high quality students to our major. Our students are active on campus in a variety of organizations, and many are recognized for their academic and extracurricular activities.

Of the 98 majors for the years reviewed, one received the Harry Gore Memorial Scholarship, three were DSI finalists, two were Clay Barton Scholars, and one was a Jabara Scholar. Twelve students were members of Barton International Group (BIG), a student-ran organization founded in 2008, that provides services to local companies and international corporations that has a very selective process for

membership and participation. A number of our students have presented their research at the University's undergraduate research symposium, URCAF. One of our majors won 1st place in the Humanities and Social Science Oral Presentation division. One of our students presented his research paper at a Midwest Economics Association conference. Three of our majors were named a WSU Senior Honor Men and five were named a WSU Senior Honor Women, a distinction given to only five male and five female university graduates per year. One of our majors was awarded Man of the Year and one was named Woman of the Year, a distinction given to only person in each category annually. One of our majors was awarded the Neff Memorial Award for Outstanding Senior, a distinction given to one Barton School of Business graduating senior each year. Three of our majors were awarded the Neff Memorial Award for Outstanding Junior, a distinction given to one Barton School of Business junior each year. One of our students was a McNair Scholar. Two of our majors served as President of the Student Government Association.

Eight of the graduated economics majors (8.2%) were inducted into Omicron Delta Epsilon, an international honor society for students in economics. Of the 98 economics majors, 42 (42.9%) of our students graduated with honors (13 graduated Cum Laude, 19 graduated Magna Cum Laude, and 10 graduated Summa Cum Laude).

Master's Program:

The quality of the program is also satisfactory. We consider it to be comparable to M.A. economics programs at other institutions. Based on exit surveys, students are satisfied with the program. In terms of current learning goals, targets are being met. The GPA of students admitted into the program is comparable to other WSU graduate programs. A number of students have presented their research at the University's Graduate Research Symposium, GRASP. Recently, a student received praise for presenting her research at a meeting of Wichita's World Trade Council.

Part 5: Student Need and Employer Demand

Analyze the student need and employer demand for the program/certificate. Complete for each program if appropriate (refer to instructions in the [WSU Program Review document](#) for more information on completing this section).

Utilize the table below to provide data that demonstrates student need and demand for the program.

Employment of Economics Majors*							
	Average Salary	Employment % In state	Employment % in the field	Employment: % related to the field	Employment: % outside the field	No. pursuing graduate or professional education	Projected growth from BLS** Current year only.
2014-15	\$45,000	60%	80%	20%	0%	5.90%	↓
2015-16	\$36,000	100%	100%	0%	0%	13.30%	
2016-17	na	50%	75%	0%	25%	0%	
2017-18	\$50,000	80%	60%	40%	0%	16.70%	

Employment of MA in Economics *							
	Average Salary	Employment % In state	Employment % in the field	Employment: % related to the field	Employment: % outside the field	No. pursuing graduate or professional education	Projected growth from BLS** Current year only.
2014-15	\$60,000	94.40%	71.40%	28.60%	0%	na	↓
2015-16	\$48,500	94.10%	75.00%	25.00%	0%	na	
2016-17	\$37,500	90.00%	16.70%	83.30%	0%	na	
2017-18	\$55,000	91.70%	77.80%	11.10%	11.10%	na	

[Note: Results are based on Exit Survey and are very sensitive to the number of responses.](#)

* May not be collected every year

** Go to the U.S. Bureau of Labor Statistics Website: <http://www.bls.gov/oco/> and view job outlook data and salary information (if the Program has information available from professional associations or alumni surveys, enter that data)

Narrative: Provide a brief assessment of student need and demand using the data from tables 11-15 from the Office of Planning Analysis for number of applicants, admits, and enrollments and percent URM students by student level and degrees conferred. AND provide a brief assessment of student need and demand using the data from tables 11-15 from the Office of Planning and Analysis and from the table above. Include the most common types of positions, in terms of employment graduates can expect to find.

Provide assessment here:

Undergraduate Program

For the first year of the assessment period, the program had 38 applicants, 33 admits and 12 enrollees (Fall census day). The last three years of the assessment period shows a significant increase across the three categories of undergraduates, with an average of 88 applicants, 82 admits and 31 enrollees annually identified. According to Table 12, a smaller percentage of our undergraduate students (an average of 10.4% of junior and seniors and 15.7% of freshmen and sophomores for years 2014 to 2016) compared

to the university overall (average of 15.3% of junior and seniors and 18.67% of freshmen and sophomores for years 2014 to 2016) are identified as being part of under-represented minorities.

As documented in other sections of this report and consistent with historical enrollments, most of the students in classes taught by the Department of Economics are not economics majors, but are instead students in other majors who are taking economics as part of their education as a business major in the Barton School, as part of another major outside the Barton School, or out of intellectual curiosity. This is consistent with other colleges and universities with business schools. Colleges and universities that do not offer business curriculum to undergraduates often have large numbers of economics majors. Given the courses offered are largely taken by non-majors at Wichita State University, addressing student needs and employer demand must be considered more broadly than looking only at economics majors.

As one of the foundation disciplines in the social sciences, the study of economics is an element of a general liberal-arts education at virtually every college and university in the United States. Undergraduates often have the option of taking economics course(s) as part of their general education coursework or general electives. One study (John J. Siegfried and William B. Walstad, "Undergraduate Coursework in Economics: A Survey Perspective," *Journal of Economic Education*, Volume 45, Issue 2, 2014, pp. 147-158, DOI: 10.1080/00220485.2014.889965)) estimated that 40% of all undergraduates at four-year institutions took at least one class in economics. In a more recent study (William Bosshardt and William B. Walstad, "Economics and business coursework by undergraduate students: Findings from Baccalaureate and Beyond transcripts," *Journal of Economic Education*, Volume 48, Issue 1, 2017, pp. 51-60, DOI: 10.1080/00220485.2016.1252299), a review of sample transcript data from the Baccalaureate and Beyond (BB) study by the National Center for Education Statistics indicated more than half (54%) of all students completed at least one course in economics. The study estimates that even after omitting economics and business majors from the calculation, 43% of students at doctoral institutions and 34% at baccalaureate institutions complete at least one economics course. These results suggest that economics is widely considered to be an important component of undergraduate education.

A study published in 2017 (John J. Siegfried, "Trends in Undergraduate Economics Degrees, 1991–2016" *The Journal of Economic Education*, 2017, Volume 48, Issue 3, 238-242, DOI: 10.1080/00220485.2017.1320613) found that between 2009-2010 and 2012-2013 the number of undergraduate degrees in economics was fairly stagnant. There was a slight uptick in the number of economics degrees in 2014-2015 of approximately 7% and about the same increase again in 2014-2015, but then leveled off to just a 2% increase in 2015-2016. In 2013-2014, between 1.6% and 2.4% of bachelor's degrees conferred were in economics according to National Center for Education Statistics (NCES), depending on how double majors were counted.

In a February 5, 2019 article by Stacy Rapacon in a Kiplinger article titled, "25 Best College Majors for a Lucrative Career" (accessed on March 12, 2019 at <https://www.kiplinger.com/slideshow/business/T012-S001-best-college-majors-for-a-lucrative-career-2019/index.html>), economics was identified as a major with potential with growing opportunities given the interest in big data. They reported annual online job postings of 901,406 with average starting salary of \$57,100 and average mid-career salary of \$105,700.

A 2014 article published in *The Journal of Economic Education* (Thomas Carroll, Djeto Assane, and Jared Busker, "Why It Pays to Major in Economics," Volume 45, Issue 2, pp. 251-261) measured the

value employers put on economics majors compared to other majors by looking at a sample of over 1.5 million recent college graduates. When no other variables were controlled for, they found that the average earnings of economics majors were 20% higher than the average earnings of all non-economics majors. Once controls were added for personal characteristics (age, ethnicity, citizen status, and English proficiency) and occupation, male business economics majors earned 6.64% more than their non-economics-major counterparts while female business economics majors saw a larger gain of 12.44% higher earnings. The earnings premium persisted for economics majors that pursued degrees beyond the bachelor's degree. Controlling for personal characteristics and occupation, economics majors with advanced degrees earned 10.68% and 7.9% higher earnings for males and females, respectively, than their non-economics major counterparts.

According to the Bureau of Labor Statistics, the employment of economists is projected to grow by 6 percent between 2016 and 2026. This is comparable to the average for all occupations. The Bureau of Labor Statistics report the 2017 median annual wage of economists to be \$102,490.

According to the Kansas Board of Regents data accessed at ksdegreestats.org, approximately 67% of WSU economics graduates work in the region with median annual earnings of graduates entering the workplace of \$39,296. The median annual earnings is higher than Finance, Management and Marketing majors at WSU but lower than that of accounting and MIS majors. Our majors fare well compared to economics majors at other Kansas institutions. With K-State median starting salaries slightly higher at \$39,480 while KU, Emporia State and Washburn all having lower median starting salaries reported (\$32,393, \$36,272, and \$27,909 respectively).

Consistent with what is reported in the occupational outlook provided by the US Bureau of Labor Statistics, many of our economics majors often find employment in other business-related fields such as market research analysts. For example, some of our recent majors have found positions at Koch Industries and Flint Hills Resources as market analysts which is expected to have an employment growth rate of 23%, according to the Occupational Outlook Handbook.

Placement:

Of the 98 students who have graduated in the past four academic years, three entered our own Master's Program through the Accelerated Degree Program and six additional students continued into our basic Master's Program in Economics (total of ten, or approximately 10%). One graduate went to Cleveland State's MA in Applied Economics and one graduate went to Simon Fraser University to work on his MA in Economics. Two students went on to well-respected MBA programs, one at Boston University and one at Oregon. Eight of our undergraduates went to law school (at Harvard, Washington University in St. Louis, Iowa, Rutgers, Kansas University and Washburn University). We do not have complete information on the employment of our majors. Of the majors that we do have employment data, students are employed as analysts at Invista; Koch Industries; Koch Supply and Trading; Spirit AeroSystems; Cornerstone Data, Cerner Corporation, Key Bank, and KS Corporation Commission. Students have found employment in the financial divisions, HR Positions, project managers, real estate, and sales positions at Deloitte Tax LLP, Grant Thornton, Sweetman Investments, Graham Advisors, Cargill, NIAR, Oklahoma Department of Commerce, InfoSync, Fidelity Bank, RCB Bank, Intrust Bank, MidAmerica Bank, Bank of America, American AgCredit, Colonial Life Insurance, EMC Insurance, IMA, USD259, Morgan Stanley, NAI Martens Commercial Real Estate, Ventus Group, DHL (supply chain) Dahlke and Associates, HSBC Data Processing (Malaysia), and Catholic Relief Services headquarters in Maryland.

Masters' program:

Master's students can pursue careers in industry, government or policy institutions. They can also use the M.A. as a stepping stone for additional graduate work. Many students are already employed when they come into the program and stay with their employer upon graduation. We are unaware of employer demand data specific to economics master's students.

Placement:

When students graduate from the program, the Department attempts to track their career progress. Of the 51 students who graduated in the academic years 2015-18, the Department has information on 35. (Most of the unreported are international students who are believed to have left the country). Career placements have been varied but often involve an analyst title, such as market or financial analyst, others are research positions.

Placements include: Credit Analyst, Koch Minerals; Data Analyst, Brierley & Partners (Dallas); Budget Analyst, NYCACS; Data Analyst, REA Group Asia; Compensation Analyst/Economist, Balanced Corp. LLC; Labor Economist, Kansas Dept. of Labor; Anti-Money Laundering Compliance Manager, Western Union; Pricing Specialist, Spirit Aerospace; Financial Analyst, Payless Shoes; Database Analyst, CompositionID Inc.; Credit Analyst, Citizen's Bank; Budget Analyst, Wichita State University; Wholesale Markets Analyst, Southern Co.; Budget Operations Analyst, IMA Inc.; Legislative Analyst, Center for State Fiscal Reform (Wash. DC); Business Analyst, Plaxos Inc.; Logistics/ Freight Payments Analyst, Invista; Bunker Broker, Cockett Marine Oil; Risk Analyst, Westar; Research Associate, WSU Center for Economic Development and Business Research.

Other graduates have continued with their academic studies, remained with their prior employer or work in their family business. We are aware of only two domestic students who were not successful in finding employment related to the degree.

Part 6: Program and Faculty Service

Analyze the service the Program/certificate provides to the **discipline, other programs at the University, and beyond**. Complete for each program if appropriate (refer to instructions in the [WSU Program Review document for more information on completing this section](#)).

Narrative: Provide a brief assessment of the service the Program provides. Comment on percentage of SCH taken by majors and non-majors (using table 16 from the Office of Planning Analysis for SCH by student department affiliation on fall census day), nature of Program in terms of the service it provides to other University programs, faculty service to the institution, and beyond.

Provide assessment here:

Undergraduate Program:

The majority of the students in many of the courses offered by the economics department are enrolled to meet business core or major requirements of the Barton School. As provided in Table 16, between 6.9 and 10.8% of SCH were taken by undergraduates majoring in economics for years 2014 to 2016. Between 84.7 and 87.4% of the SCH are taken by non-majors over the same period. The remaining (approximately 4.5 to 6.5%) are taken by potential graduate students who take these courses to meet entrance requirements to the Master's in economics program.

As discussed earlier, the Economics Department offers multiple sections each semester of Econ 201 and ECON202, Principles of Macroeconomics and Principles of Microeconomics as well as Econ 231 and Econ 232, Introductory Business Statistics and Statistical Software Applications for Business, as they are required in the business core of all business majors in the Barton School.

All finance majors in the Barton School are required to take Econ 340, Money and Banking. Many finance majors and minors take Econ 674, International Finance, as it is cross-listed as a finance course and is an elective for finance majors and minors. International Business (IB) majors are required to take Econ 672, International Economics and are given the option to take ECON 674, International Financial Management, as an upper division economics elective as they are cross-listed as International Business (IB) courses.

Econ 611, Economics of Sports, primarily has served the needs of both business majors in the Barton School and as an upper division elective class for sports administration majors in the College of Applied Sciences. Additionally, the department offers two courses, Econ 400 and 401, Economics in the Classroom, Part I and Economics in the Classroom, Part II to serve the needs of students in the College of Education planning to become social studies teachers.

Given the majority of courses serve other majors in the Business School and across campus, only three courses: Economics 301, Intermediate Macroeconomics; Economics 302, Intermediate Microeconomics; and Econ 403, Business and Economics Forecasting) are taught by Department faculty that otherwise would probably not be offered otherwise.

Master's Program:

SCH hours generated by economics MA students is a small portion of total SCH generated by the Department. For the academic years 2014-2016 (Table 16), they account for, respectively, 5.4%, 6.5% and 4.5% of all Department SCH. Most economics graduate classes are primarily taken by students enrolled in the master's program. The primary exception is Econ 804 (Managerial Economics) which is a required course for MBA students and an occasional elective for graduate students in other disciplines (e.g., accounting, industrial engineering). For example, in AY17, of the 99 students enrolled in Econ 804, 88 were non- economics students. More recently, Econ 731 and 803 have been made options for the Data Analytics badge offered by the Barton School. Econ 731, 740 and the newly created Econ 722 are also open to undergraduate students.

Part 7: Graduate Enrollment Management (GEM)

For each graduate program, summarize and reflect on the progress you have made toward your GEM plan following the (a)-(e) template.

Narrative:

- a. Program name:
- b. In 2-4 sentences, summarize the GEM plan, paying particular attention to the vision, actions, and GEM evaluation.
- c. Discuss how graduate assistantships are being used to advance the GEM goals.
- d. Provide an assessment of successes, challenges, and deficiencies with the GEM plan.
- e. Summarize how the GEM plan is being updated going forward based on the findings above.

Provide assessment here:

- a. Masters of Arts in Applied Economics
- b. The program was revamped in Fall 2018 in order to make it more attractive to students (3 fewer hours, a new Data Analytics concentration, stackability). The Department is also reaching out to select-undergrad economics majors in key classes to recruit into the accelerated dual BS/MA degree.
- c. The Department currently is budgeted for 3.5 graduate assistantships in both spring and fall semesters. A new assistantship is awarded when one becomes available (e.g., when a current holder graduates). As such, typically, only two new assistantships are awarded per academic year. These may be awarded to a student entering the program or one who has performed well in his/her first semester or year of study. It is expected that starting Fall 2019, additional assistantships will become available to MA economics students through the recently established Institute for the Study of Economic Growth. An assistantship may be used as an inducement to attract high quality new students. Most of our students seeking an assistantship are international. This is both because of the waiver of nonresident fees and that most domestic students are already employed.
- d. It's too early to assess whether the changes were successful in increasing enrollments. Anecdotally, a number of new students have expressed an interest in the new Data Analytics concentration within the degree.
- e. There are no additional changes currently under consideration.

Part 8: Undergraduate Enrollment Management

For each undergraduate program, summarize and reflect on the progress you have made toward your colleges enrollment goals.

Narrative:

- a. Program name:
- b. In 2-4 sentences, summarize how the department and faculty have engaged in strategic enrollment management,
- c. Discuss how faculty have been engaged in recruitment and retention activities.
- d. Provide an assessment of successes, challenges, and deficiencies with departmental activities.

Provide assessment here:

- a. Undergraduate economics major
- b. Faculty from the department actively participate in events geared toward high school students and hosted by Admissions and in Kansas Council of Economic Education (KCEE). One of our faculty members participates in orientation. The department offers tutoring services to undergraduates, encourages students to major in economics, and provides academic advising to majors in an effort to retain students.
- c. Recruitment: Four of our faculty members have taken campus visit appointments with prospective students when informed of interested students and/or requested by admissions. One of our faculty members has met with potential students as requested by the Athletic Department. Four of our faculty members have served as judges and/or committee members for university and Barton School scholarships. Four of our faculty members have attended and hosted tables at Koch Scholars visits, majors/minor fairs, business career fairs. One of our faculty members has presented numerous sessions at Junior Day and Black and Yellow Days. Three of our faculty members help with and interact with participants at KCEE finance and economics challenges that bring high school students to campus.

Recruitment and Retention: Our department chair sends letters to students who have performed well in principles courses to meet with him and another faculty member (department undergraduate advisor) to discuss economics coursework, employment and career opportunities. Students are encouraged to meet each semester with department undergraduate advisor to select courses. Two of our faculty members have made faculty welcome remarks/presentations to BADM courses for transfer students. At least one faculty member has attended each of the College Connections events. The Department maintains an Economics Tutoring Office that provides one-on-one tutoring in Principles of Economics (ECON 201, 202) and Business Statistics (ECON 231). The tutoring office is staffed by graduate assistants from the MA program and select undergraduate majors.

Faculty in the department regularly uses the SEAS Early Alert System to let students know if they are underperforming in the areas of participation, assigned work and/or exams.

- d. Given the slight uptick in the number of majors we believe our efforts have been successful. Students are receptive to discussing adding economics as a major with approximately one-third of those who meet with the department chair and/or undergraduate adding economics as a major and large proportion of the others add the minor. We are also able to retain almost 10% by transitioning them into the MA program.

Part 9: Program Goals from Last Review

Report on the Program's/certificate's goal (s) from the last review. List the goal (s), data that may have been collected to support the goal, and the outcome. Complete for each program if appropriate ([refer to instructions in the WSU Program Review document for more information on completing this section](#)).

(For Last 3 FYs)	Goal (s)	Assessment Data Analyzed	Outcome
Undergraduate Program	Promote economic literacy	Enrollment Data	Total SCH taken by majors and non-majors has dropped slightly (less than 0.5%) but remains strong
	Increase the number of students that pursue economics as a degree	Enrollment Data	Number of majors have increased from 99 in Fall 2013 to 131 in Fall 2016; Number of graduates have increased from 14 in 2013 to 24 in 2017
	Hire, retain, and promote qualified faculty to teach undergraduate courses		<p>All tenure-track faculty hold doctoral degrees in economics from well-recognized economics programs.</p> <p>A number of Department faculty have been recognized by the University and Business School for their teaching efforts.</p> <p>The number of full-time teaching faculty will likely be reduced with the loss of one tenure track professor and likely impending retirements, placing a greater burden on remaining faculty. While the Institute for the Study of Economic Growth will increase the number of tenure or tenure-track faculty associated with the department, it is anticipated that their primary teaching assignment will eventually be to offer sections of a Fundamentals of Business course (to be taken by incoming business students) rather than courses to support the economics programs.</p>

	To have students obtain an understanding of basic macro and microeconomic models.	Learning Outcomes Data	All but two targets were met, improvement warranted.

(For Last 3 FYs)	Goal (s)	Assessment Data Analyzed	Outcome
Master's Program	To maintain a qualified faculty to teach graduate courses and supervise student research.	Faculty Activity Reports.	<p>With the exception of one elective course, all graduate classes are taught by faculty who are active engaged in research.</p> <p>Student research projects have been directed by the professors engaged in research.</p> <p>The concerns regarding future retirements mentioned in the undergraduate table apply to the MA as well.</p>
	To annually enroll 10-20 qualified students into the program.	<p>Enrollment data.</p> <p>Graduation data</p> <p>Academic performance data.</p>	<p>Goals have been met.</p> <p>New students enrolled for</p> <p>AY16 : 14</p> <p>AY17: 17</p> <p>AY18: 15</p> <p>Of these 46 students, 17 have since graduated. 15 are currently in the program in good academic standing. Only 4 left the program for academic reasons. The remaining 10 left for non-academic reasons (e.g., job related, transfer to MBA, etc.).</p>

	To have at least 80 percent of graduates obtain positions consistent with their career goals.	Student self-reported data (supplemented, where possible, with online searches, e.g., LinkedIn).	Based on available data, this goal has been achieved.
	To have students obtain an advanced understanding of basic macro and microeconomic models.	Learning Outcomes Data M.A. Learning Outcomes #2-8	AY15-18: Percent of outcomes achieving target criteria ranged from 84 to 100%
	To have students acquire the ability to perform empirical economic research.	Learning Outcomes Data M.A. Learning Outcome #1	AY15-18: Students are performing particularly well in this area with 96% of students having met target criteria.

Part 10: Summary

Narrative: a. Set forth a summary of the report including an overview evaluating the strengths and concerns. List recommendations for improvement of each Program (for departments with multiple programs) that have resulted from this report (relate recommendations back to information provided in any of the categories and to the goals and objectives of the program as listed in 1e).

Provide assessment here:

Undergraduate

For the time period under review, we have seen a steady increase in majors. Consistent with this trend, the number of graduates per year has also increased. According to the data provided by the Office of Planning and Analysis, in the academic years of 2012 to 2014, we graduated an average of 13 individuals per year. The same data indicated we graduated an average of 19 majors annually for years 2015 to 2017. Data provided by the Business Advising Office suggests that we had more undergraduates matriculate, with an average of 23 per year. The difference in numbers may be attributed to students with double or triple majors.

The department continues to offer high quality instruction to students. Five of our nine full-time teaching faculty have been recognized with teaching awards from the Business School and/or University. All but two of our learning outcome targets are being met. Interventions have been identified and will be implemented to address the deficiency in student performance in these two areas.

The basic requirements for the economics major and minor are consistent with other AACSB accredited business schools. Prior to our last review, we introduced a Business Forecasting course to meet the identified weakness of the lack of an econometrics course geared specifically for undergraduate majors. Given we do not have a full-time tenure track professor available to teach that course, we have not yet

made this a requirement as we rely on an economist with the Center for Economic Development and Research to teach that course. An ongoing potential weakness of the program is the lack of a senior seminar or capstone course (advanced topics or research methods course). Many peer schools also offer elective courses in areas such as developmental economics, environmental economics and history of economic thought. These omissions are primarily the result of not having enough faculty members to provide all the courses that would ideally be included in the economics major.

Masters:

Overall, the program is on solid footing. Although admissions have declined since the AY15, they remain within the target range. As previously noted, actions have been taken to improve admissions, most notably a revamping of the program in Fall 2019. Students have been successful in completing the program and in securing relevant employment post-graduation. All learning outcomes are currently being met. (An outcome that failed to achieve its target level in prior years, achieved the target after an appropriate course intervention was introduced).

The level and quality of research output of the faculty is consistent with that of an economics MA program. The addition of new faculty (joint appointment) with the Institute for the Study of Economic Growth is expected to further enhance research productivity, although this may be offset by faculty retirements in the coming years. The Institute is also expected to provide funding for additional graduate assistantships, currently a program need.

Part 11: Forward-facing goals

Narrative: b. Identify goal (s) for the Program to accomplish in time for the next review. Goals must be **Specific, Measurable, Attainable, Realistic and Time-bound (SMART)**.

List goals here:

Undergraduate:

Program goals for the upcoming three years remain unchanged:

- a. Promote economic literacy
- b. Increase the number of students that pursue economics as a major
- c. Hire, retain and promote qualified faculty to teach undergraduate courses
- d. To have students obtain an understanding of microeconomics concepts and theories that explain the behavior of individuals, businesses, and industries in market-based systems.
- e. To have students obtain an understanding of standard macroeconomics concepts and theories to explain the behavior of and predict events in industrialized macro economies.

Master's:

Program goals for the upcoming review period remain unchanged:

- a. To maintain a qualified faculty to teach graduate courses and supervise student research.
- b. To annually enroll 10-20 qualified students into the program.

- c. To have at least 80 percent of graduates obtain positions consistent with their career goals.
- d. To have students obtain an advanced understanding of basic macro and microeconomic models.
 - e. To have students acquire the ability to perform empirical economic research.

APPENDIX A
Barton School of Business
Faculty Qualifications and Engagement Criteria
Approved May 2015

I. Faculty Categories. Barton School of Business faculty members are categorized according to their initial academic preparation and professional experience, and, to their sustained academic and professional engagement activities. As detailed in AACSB Standard 15, the following four categories are used to classify faculty, inclusive of those holding administrative appointments (e.g., chairs, directors, and deans), deployed by the college:

Scholarly Academics (SA) sustain currency and relevance through scholarship and related activities. SA status is granted to faculty members who earned their terminal doctorate degree in a field consistent and appropriate to their teaching assignment.

Practice Academics (PA) sustain currency and relevance through professional engagement, interaction, and relevant activities. PA status is applied to faculty members who augment their initial preparation as academic scholars with development and engagement activities that involve substantive linkages to practice, consulting, and other forms of professional engagement.

Scholarly Practitioners (SP) sustain currency and relevance through continued professional experience, engagement, or interaction and scholarship related to their professional background and experience. SP status is applied to practitioner faculty members who augment their experience with development and engagement activities involving substantive scholarly activities in their fields of teaching.

Instructional Practitioners (IP) sustain currency and relevance through continued professional experience and engagement related to their professional backgrounds and experience. IP status is granted to newly hired faculty members who join the faculty with significant and substantive professional experience.

Faculty members who do not meet the definitions for these four categories, as outlined below, will be classified as **Other Qualified (OQ)** faculty.

II. Scholarly Academics (SA). To be classified as a Scholarly Academic, faculty members must satisfy *both* the initial academic preparation criteria and the sustained engagement criteria over the previous five years.

A. Initial Academic Preparation. The following criteria are used as the basis of judgment for determining if a faculty member meets the initial academic preparation criteria for the Scholarly Academic classification:

Faculty members holding a research-based doctorate in their primary teaching field, or a Juris Doctorate for faculty members who teach business law, shall be considered to have satisfied the initial academic preparation criteria for SA status.

Faculty members holding a research-based business doctorate that is outside of their primary teaching field shall be considered to have met the initial academic preparation criteria for SA status provided they exhibit evidence of active involvement in the teaching area through activities such as authorship, participation in professional meetings, or related activities devoted to the teaching area.

Faculty members who hold a doctoral degree outside of business (business is interpreted to include the field of economics), but whose primary teaching responsibilities fall within their area of academic preparation will be considered to have met the initial academic preparation criteria for SA status if they demonstrate evidence of active involvement in the area of teaching responsibility through activities such as authorship, participation in professional meetings, or related activities. The greater the disparity between the field of academic preparation and the area of teaching, the greater the need for supplemental preparation in the form of professional development linked to the teaching area.

Faculty members who hold a doctoral degree outside of business, but whose primary teaching responsibilities do not fall within their area of academic preparation will be considered to have met the initial academic preparation criteria for SA status if they have completed additional graduate coursework or professional development sufficient enough to provide a basis for participation in the mix of teaching, intellectual contribution, and service required by the college. Recognized professional certifications or licenses may be used to demonstrate training and expertise in a primary teaching field.

Faculty members who possess a specialized graduate degree in taxation or a combination of graduate degrees in law and accounting will be considered to have met the SA initial academic preparation criteria to teach taxation courses.

Faculty members who are graduate students in a research-based, business (including economics) doctoral field who had attained "ABD" status when hired by the Barton School of Business will be considered to have met the SA initial academic preparation criteria for no more than three academic years beyond the date of hire.

Faculty members completing a doctoral degree in their primary area of teaching will be considered to have met the initial academic preparation criteria for SA for five years from the date the degree is received.

B. Sustained Academic Engagement Activities. The following criteria are used as the basis of judgment for determining if a faculty member meets the sustained engagement activities criteria for the Scholarly Academic classification:

Research Proficiency. Over the previous five years, Scholarly Academics must publish a minimum of two (2) peer-reviewed journal articles in widely recognized academic journals relevant to the mission of the Barton School of Business. (Acceptable academic journals include those indexed by leading bibliographic sources, are frequently cited, and are readily available to researchers through major academic libraries and the internet. Normally, conference proceedings, non-peer-reviewed journals, and vanity press titles are not acceptable for this criterion.) One book, published by a leading academic press with significant national or international distribution, may substitute for one peer-reviewed journal article.

Academic Engagement Proficiency. Over the previous five years, Scholarly Academics must maintain active academic engagement as evidenced by the production of a minimum of two (2) intellectual contributions such as:

1. Peer-reviewed or invited conference presentation*
2. Publication of a conference proceedings paper or abstract*
3. Publication of an original article in a non-peer-reviewed journal or periodical
4. Publication of an original article in an edited volume published by an academic press
5. Publication or revision of a book directly related to the mission of the Barton School of Business
6. Publication of an authored or edited volume published by an academic press
7. Publication of original research in an open source, non-peer-reviewed, electronic journal
8. Publication of a business case study by an academic press
9. Service as an editor, associate editor, guest editor, editorial board member, or reviewer of an established academic journal or periodical
10. Publication of a book review in an academic or practitioners' journal
11. Receipt of a peer-reviewed funded grant that supports the Barton School of Business
12. Receipt or renewal of a professional certification that enhances the classroom and research
13. Service as a major officer for an academic association or scholarly organization
14. Production of other scholastic or creative works and/or other activities that further the mission of the college and are approved by the Barton School Executive Committee

*The same research paper cannot be counted in more than one category.

III. Practice Academics (PA). To be classified as a Practice Academic, faculty members must satisfy *both* the initial academic preparation criteria and the sustained engagement criteria over the previous five years.

A. Initial Academic Preparation. Normally, the doctoral degree requirements for Practice Academics are the same as those outlined in Section II. A. for Scholarly Academics. Exceptions to these criteria may be made on a case-by-case basis as evaluated by the Barton School Executive Committee relative to the college mission and overall university needs.

B. Sustained Professional Engagement Activities. Evidence of sustained professional engagement for Practice Academics should include *significant* activities in a minimum of *two (2) different* engagement categories during the most recent five year period. Acceptable categories of activities include:

1. Consulting projects and activities
2. Faculty internships
3. Development and presentation of executive education programs
4. Sustained professional work
5. Participation in business professional associations and societies
6. Practice-oriented intellectual contributions as discussed in Standard 2
7. Active service on corporate, government, or non-profit boards
8. Production and delivery of professional development activities
9. Consultation or research for economic development agencies
10. Regular maintenance or acquisition of professional certifications and/or licenses
11. Invited professional public speaking
12. Participation in other activities that place faculty in direct contact with business and/or other organizational leaders

Engagement activities must be documented and readily verifiable by the Barton School Executive Committee. To be considered as part of a Practice Academic portfolio, engagement activities must be reported on the faculty members' annual performance documents and included within the Sedona information system.

To be considered *significant*, a faculty member must demonstrate either (1) the sum of all professional engagement activities conducted by the faculty member comprise no less than 10 percent of that faculty member's workload or (2) the faculty member's professional engagement activities result in a substantial and lasting impact on the client, the public, or the faculty member.

IV. Scholarly Practitioners (SP). To be classified as a Scholarly Practitioner, faculty members must satisfy *both* the initial academic and professional preparation criteria and the sustained engagement criteria over the previous five years.

A. Initial Academic and Professional Preparation. Faculty members classified as Scholarly Practitioners must meet minimum standards in both academic and professional preparation prior to employment.

Academic Preparation. Faculty members holding Scholarly Practitioner status will have obtained a terminal or non-terminal graduate degree in business or their primary field of teaching. This advanced academic preparation is defined as an earned MBA, appropriate master's degree or another appropriate professional graduate degree relevant to the mission of the Barton School of Business. In limited cases, faculty members without an earned master's degree may serve as Scholarly Practitioners if the depth, duration, sophistication, and complexity of their professional experience at the time of hire outweigh their lack of a graduate degree. Such cases must further the mission of the college and be validated by the Barton School Executive Committee.

Professional Preparation. Scholarly Practitioners will demonstrate significant professional achievements relevant to their primary teaching area prior to their date of hire. Significant professional achievements are defined as professional full-time employment at a level of responsibility and duration appropriate for the

course(s) that the faculty members are assigned to teach. This employment may include working in industry, business, government or education for a period of three years for introductory undergraduate courses, four years for upper level undergraduate courses, and five years for master's courses. Normally, Scholarly Practitioners will have managerial and executive level experiences that enhance their teaching and other contributions to the college.

B. Sustained Academic Engagement Activities. Over the previous five years, Scholarly Practitioners must maintain active academic engagement as evidenced by the production of a minimum of two (2) academic contributions such as:

1. Publication of an article in a peer-reviewed academic journal
2. Peer-reviewed or invited conference presentation*
3. Publication of a conference proceedings paper or abstract*
4. Publication of an original article in a non-peer-reviewed journal or periodical
5. Publication of an original article in an edited volume published by an academic press
6. Publication or revision of a book directly related to the mission of the Barton School of Business
7. Publication of an authored or edited volume published by an academic press
8. Publication of original research in an open source, non-peer-reviewed, electronic journal
9. Publication of a business case study by an academic press
10. Service as an editor, associate editor, guest editor, editorial board member, or reviewer of an established academic journal or periodical
11. Publication of a book review in an academic or practitioners' journal
12. Receipt of a peer-reviewed funded grant that supports the Barton School of Business
13. Receipt or renewal of a professional certification that enhances the classroom and research
14. Service as a major officer for an academic association or scholarly organization
15. Production of other scholastic or creative works and/or other activities that further the mission of the college and are approved by the Barton School Executive Committee

*The same research paper cannot be counted in more than one category.

V. Instructional Practitioners (IP). To be classified as an Instructional Practitioner, faculty members must satisfy *both* the initial academic and professional preparation criteria and the sustained engagement criteria over the previous five years.

A. Initial Academic and Professional Preparation. Faculty members classified as Instructional Practitioners must meet minimum standards in both academic and professional preparation prior to employment.

Academic Preparation. Faculty members holding Instructional Practitioner status will have obtained a terminal or non-terminal graduate degree in business or their primary field of teaching. This advanced academic preparation is defined as an earned MBA, appropriate master's degree or another appropriate professional graduate degree relevant to the mission of the Barton School of Business. In limited cases, faculty members without an earned master's degree may serve as Instructional Practitioners if the depth, duration, sophistication, and complexity of their professional experience at the time of hire outweigh their lack of a graduate degree. Such cases must further the mission of the college and be validated by the Barton School Executive Committee.

Professional Preparation. Instructional Practitioners will demonstrate significant professional achievements *and/or* publicly recognized professional expertise relevant to their primary teaching area prior to their date of hire.

Significant professional achievements are defined as professional full-time employment at a level of responsibility and duration appropriate for the course(s) that the faculty members are assigned to teach. This employment may include working in industry, business, government or education for a period of three years for introductory undergraduate courses, four years for upper level undergraduate courses, and five years for master's courses.

Publicly recognized professional expertise is defined as the attainment of significant professional certifications and/or licenses awarded by industry-specific organizations or governmental agencies. Acceptable credentials must include demonstration of acquired knowledge and skills and continuing education. Faculty members with professionally recognized expertise but without significant professional achievements as defined above are limited to teaching undergraduate courses in their area of expertise.

B. Sustained Professional Engagement Activities. Evidence of sustained professional engagement for Instructional Practitioners should include *significant* activities in a minimum of *two (2) different* engagement categories during the most recent five year period. Acceptable categories of activities include:

1. Consulting projects and activities
2. Faculty internships
3. Development and presentation of executive education programs
4. Sustained professional work
5. Participation in business professional associations and societies
6. Practice-oriented intellectual contributions as discussed in Standard 2
7. Active service on corporate, government, or other non-profit boards
8. Production and delivery of professional development activities
9. Consultation or research for economic development agencies
10. Regular maintenance or acquisition of professional certifications and/or licenses
11. Invited professional public speaking
12. Participation in other activities that place faculty in direct contact with business and/or other organizational leaders

Engagement activities must be documented and readily verifiable by the Barton School Executive Committee. To be considered as part of an Instructional Practitioner portfolio, engagement activities must be reported on the faculty members' annual performance documents and included within the Sedona information system.

To be considered *significant*, a faculty member must demonstrate either (1) the sum of all professional engagement activities conducted by the faculty member comprise no less than 10 percent of that faculty member's workload or (2) the faculty member's professional engagement activities result in a substantial and lasting impact on the client, the public, or the faculty member.

VI. Other Qualifications (OQ). Faculty members who do not meet the criteria for Scholarly Academic, Practice Academic, Scholarly Practitioner, or Instructional Practitioner are categorized as holding Other Qualifications. To further the college mission, OQ faculty members are encouraged to acquire additional academic preparation and/or conduct additional professional engagement activity in order to be reclassified.

VII. Implementation. The appropriate qualification and engagement category for all Barton School of Business faculty members will be determined each spring semester. Faculty members will convey to their department chair the category they wish to be assigned. Final determination of the appropriate category will be made by the department chair in consultation with the dean and validated by the Barton School Executive Committee. Annual performance reviews, information contained within the Sedona information system, current curriculum vitae, and other appropriate documentation provided by faculty members may be used in making a classification determination. Newly hired faculty members will be classified at the time of employment. Faculty qualification status will be valid for the forthcoming academic year or until such time as a new qualification status is determined.

**APPENDIX B
LEARNING OUTCOME RUBRICS USED IN ASSESSMENT**

Economics Undergraduate Program

Overall Learner Outcome 1: Identify standard microeconomics concepts and theories to explain the behavior of individuals, businesses, and industries in market-based systems.

Learning Outcomes	Assessment Tool (e.g., portfolios, rubrics, exams)	Does not meet Expectations	Meets Expectations	Exceeds Expectations	Target/Criteria (desired program level achievement)
Students will describe consumer choice theory using indifference curves and budget constraints.	Intermediate Microeconomics Homework Questions and Exam 1 Questions	Failure to demonstrate basic knowledge of concepts.	Demonstrates basic knowledge of concepts. Correctly labels graphs identifying utility maximization. Some understanding of substitution and income effects associated with a price change.	Demonstrates advanced knowledge of and ability to apply concepts. Correctly labels graphs identifying utility maximization. Correctly identifies and explains substitution and income effects associated with a price change.	80% Meets or exceeds expectations.
Students will define costs minimization using isocost and isoquant analysis.	Intermediate Microeconomics Homework Questions and Exam 2 Questions	Failure to demonstrate basic knowledge of concepts.	Demonstrates basic knowledge of concepts. Correctly labels graphs identifying cost minimization. Some Understanding of marginal rate of technical substitution.	Demonstrates advanced knowledge of and ability to apply concepts. Correctly labels graphs identifying cost minimization. Correctly identifies and explains marginal rate of technical substitution.	80% Meets or exceeds expectations.

Learning Outcomes	Assessment Tool (e.g., portfolios, rubrics, exams)	Does not meet Expectations	Meets Expectations	Exceeds Expectations	Target/Criteria (desired program level achievement)
Students will differentiate short-run and long-run implications of a change in market conditions in a perfectly competitive market.	Intermediate Microeconomics Homework Questions and Exam 3 Questions	Failure to demonstrate basic knowledge of concepts.	Demonstrates basic knowledge of concepts. Correctly labels graphs identifying a perfectly competitive market in the short run, a change in market conditions, and long run implications.	Demonstrates advanced knowledge of and ability to apply concepts. Correctly labels graphs identifying a perfectly competitive market in the short run, a change in market conditions, and long run implications. In addition, understands the efficiency differences between short run and long run equilibriums.	80% Meets or exceeds expectations.

Overall Learner Outcome 2: Students identify standard macroeconomics concepts and theories to explain the behavior of and predict events in industrialized macro economies.

Learning Outcomes	Assessment Tool (e.g., portfolios, rubrics, exams)	Does not meet Expectations	Meets Expectations	Exceeds Expectations	Target/Criteria (desired program level achievement)
Students will describe basic Keynesian IS-LM Aggregate Supply model.	Intermediate Macroeconomics Exam Question(s)	Failure to demonstrate basic knowledge of concepts.	<p>Demonstrates basic knowledge and concepts.</p> <p>Correctly labels graphs in IS-LM model.</p> <p>Some understanding of the impact of changes in monetary or fiscal policy even if math mistakes are made.</p>	<p>Demonstrates advanced knowledge and ability to apply concepts.</p> <p>Correctly labels graphs and shifts appropriate function in response to changes in monetary or fiscal policy, and correctly determines the new equilibrium output and interest rate.</p>	80% Meets or exceeds expectations.
Students will Define the basic Solow growth model.	Intermediate Macroeconomics Exam Question(s)	Failure to demonstrate basic knowledge of concepts.	<p>Students demonstrate knowledge of the Solow model, and correctly identify either the effect of investment or that of population growth on per capita output.</p> <p>They may make some arithmetical mistakes.</p>	<p>Demonstrates advanced knowledge of ability to apply concepts.</p> <p>Students correctly label graphs, and correctly identify the impact of greater investment and population growth on per-capita output, and correctly complete algebraic problems.</p>	80% Meets or exceeds expectations.

Economics Graduate Program

Overall Learner Outcome 1. To have students obtain an advanced understanding of standard macro and microeconomic models.

Learning Outcomes	Assessment Tool (e.g., portfolios, rubrics, exams)	Does not meet Expectations	Meets Expectations	Exceeds Expectations	Target/Criteria (desired program level achievement)
Students will be able to analytically differentiate between competitive and noncompetitive market structures.	Econ 804 (Exam 2)	Inability to mathematically work with the competitive and monopoly models. Lacks understanding of basic concepts.	Can mathematically work with the competitive and monopoly models to obtain market results (price and output) in both short and long-runs.	In addition, understands the efficiency differences between competitive and monopoly markets.	80% Meets or exceeds expectations.
Students will be able to work basic game theory models	Econ 804 (Exam 3)	Inability to find Nash equilibrium in basic games. Inability to set up games in strategic and/or extended form.	Can solve for Nash equilibriums from given game structures. May have difficulty in correcting setting up a game.	Can both solve and set up games in strategic and extended form.	80% Meets or exceeds expectations.
Students will be able to use optimization techniques as applied to economic models.	Econ 702 (Exam 1) Econ 702 (Exam 2)	Inability to set up models to find maximums or minimums – for unconstrained or constrained optimization. Lacks understanding of basic concepts.	Can correctly set up the mathematical model to obtain a maximum or minimum. May make errors in solving for optimal values.	Can correctly set up and solve for optimum values. Can correctly apply second order condition rules to verify found maximum or minimum.	80% Meets or exceeds expectations.
Students will be able to work through macroeconomic models under Classical, Keynesian, New Classical and New Keynesian assumptions and determine their policy implications	Econ 801 (Exam 2) Econ 801 (Exam 3)	Cannot correctly compute equilibrium in the IS-LM or graphically demonstrate equilibrium in the Bernanke-Blinder model.	Correctly sets up IS-LM problems, and correctly graphs the Bernanke-Blinder model allowing for some minor graphical mistakes.	Correctly computes IS-LM equilibrium and correctly graphs equilibrium in the Bernanke-Blinder model.	80% Meets or exceeds expectations.

Learning Outcomes	Assessment Tool (e.g., portfolios, rubrics, exams)	Does not meet Expectations	Meets Expectations	Exceeds Expectations	Target/Criteria (desired program level achievement)
Students will be able to solve long-run macroeconomic growth models.	Econ 801 (Exam 1)	Student cannot mathematically determine equilibrium per-capita output resulting from changes in savings and lacks a graphical understanding of the Solow growth model.	Student correctly sets up math in Solow growth model even if computational mistakes are made. Graphical analysis may be mostly correct but contain some mistakes.	Can correctly compute equilibrium per-capita output in the Solow growth model and can correctly compute new equilibria based on changes in savings, and does graphs of the Solow model completely correctly.	80% Meets or exceeds expectations.
Students will demonstrate an understanding of long run growth theory and be able to apply what they have learned in interpreting the experience of a particular country.	Term Paper (Econ 801)	<p>Student cannot develop a topic without substantial assistance from professor.</p> <p>Student cannot cite relevant literature and, where relevant, inappropriate data is employed.</p> <p>Errors in applying macroeconomic theory.</p> <p>Conclusions are not supported by the analysis.</p>	<p>Student develops their own topic.</p> <p>Appropriate literature is cited and, where relevant, appropriate data is employed.</p> <p>Students reasoning is theoretically sound.</p> <p>Student might overstate their conclusions not fully understanding limitations of underlying theories or data used.</p>	<p>Student clearly demonstrates a knowledge of growth theory by showing how a country's experience matches up with such theory.</p> <p>Student utilizes data in a manner which supports their conclusion</p> <p>Student understands the limitations of their paper.</p>	80% Meets or exceeds expectations.

Overall Learner Outcome 2. To have students acquire the ability to perform empirical economic research.

Learning Outcomes	Assessment Tool (e.g., portfolios, rubrics, exams)	Does not meet Expectations	Meets Expectations	Exceeds Expectations	Target/Criteria (desired program level achievement)
Students will conduct research using statistical tools.	Research Project (Econ 803)	Student cannot develop a topic without substantial assistance from professor. Student cannot independently obtain data or collects inappropriate data. Student fails to use appropriate statistical technique in analyzing data. Student makes incorrect inferences from his/her results.	Student develops their own topic, collects appropriate data, uses appropriate techniques in analyzing the data and makes correct inferences. Data sources may be secondary (e.g., government web site). Student might overstate their results due to not fully understanding statistical limitations of the study.	Topic is original. Data may be from primary sources. Uses sophisticated regression techniques. Makes correct inferences and understands limitations of the study.	80% Meets or exceeds expectations.